

HCFA Information
Resource Center

COMMITTEE ON WAYS AND MEANS
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OVERVIEW OF ENTITLEMENT PROGRAMS

1993 GREEN BOOK

BACKGROUND MATERIAL AND DATA ON PROGRAMS
WITHIN THE JURISDICTION OF THE COMMITTEE
ON WAYS AND MEANS



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Section 4. Medicare

Medicare, authorized under title XVIII of the Social Security Act, is a nationwide health insurance program for the aged and certain disabled persons. It consists of two parts: the hospital insurance (part A) program and the supplementary medical insurance (part B) program.

ELIGIBILITY

Most Americans age 65 or older are automatically entitled to protection under part A. Persons age 65 or older who are not "fully insured" (i.e., not eligible for monthly Social Security or railroad retirement cash benefits) may obtain coverage, providing they pay the full actuarial cost of such coverage. For those who are not automatically entitled to part A benefits, the monthly premium, as of January 1, 1993, is \$221. Also eligible, after a 2-year waiting period, are people under age 65 who are receiving monthly Social Security benefits on the basis of disability and disabled railroad retirement system annuitants. (Dependents of the disabled are not eligible.) Most people who need a kidney transplant or renal dialysis because of chronic kidney disease are, under certain circumstances, entitled to benefits under part A regardless of age.

Part B of Medicare is voluntary. All persons age 65 or older (whether "insured" or not) may elect to enroll in the supplementary medical insurance program by paying the monthly premium. Persons eligible for part A by virtue of disability or chronic kidney disease may also elect to enroll in part B. The premium, as of January 1, 1993, is \$36.60 per month.

NUMBER OF BENEFICIARIES

In fiscal year 1993, approximately 31.3 million aged and 3.7 million disabled will have protection under part A. Of those, it is estimated that 6.9 million aged and 0.8 million disabled will actually receive reimbursed services. In fiscal year 1993, 30.8 million aged and 3.4 million disabled will be enrolled in part B. Over 26.0 million of the aged and 2.7 million of the disabled will receive part B reimbursed services.

TABLE 1.—NUMBER OF AGED AND DISABLED ELIGIBLE ENROLLEES AND BENEFICIARIES, AND AVERAGE AND TOTAL MEDICARE BENEFIT PAYMENTS—Continued

[Persons in thousands]

	Fiscal year							Projected average annual growth (percent)				
	1975 (actual)	1980 (actual)	1985 (actual)	1990 (actual)	1991 (actual)	1992 (actual)	1993 ¹ (esti- mate)	1994 ¹ (esti- mate)	1995 ¹ (esti- mate)	1975-85	1985-90	1990-95
Part A:												
Persons with hospital insurance protection (monthly average):												
Aged.....	21,795	24,571	27,123	29,801	30,456	30,365	31,329	31,753	32,146	2.2	1.9	1.5
Disabled.....	2,047	2,968	2,944	3,270	3,380	3,560	3,749	3,932	4,105	3.7	2.1	4.7
Total.....	23,842	27,539	30,067	33,071	33,836	34,425	35,078	35,685	36,251	2.3	1.9	1.9
Beneficiaries receiving reimbursed services:												
Aged.....	4,906	5,943	6,168	6,070	6,110	6,730	6,860	6,990	7,140	2.3	-0.3	3.3
Disabled.....	456	721	672	680	700	735	775	820	860	4.0	0.2	4.8
Total.....	5,362	6,664	6,840	6,750	6,810	7,465	7,635	7,810	8,000	2.5	-0.3	3.5
Average annual benefit per person enrolled: ^{2 3}												
Aged.....	\$326	\$853	\$1,563	\$1,971	\$2,007	\$2,320	\$2,552	\$2,832	\$3,115	17.0	4.7	9.6
Disabled.....	\$345	\$948	\$1,806	\$2,139	\$2,177	\$2,520	\$2,693	\$2,924	\$3,175	18.0	3.4	8.2
Total.....	\$327	\$863	\$1,587	\$1,987	\$2,024	\$2,341	\$2,567	\$2,842	\$3,122	17.1	4.6	9.5
Part B:												
Persons enrolled (average):												
Aged.....	21,504	24,422	27,049	29,426	29,910	30,375	30,802	31,196	31,548	2.3	1.7	1.4
Disabled.....	1,835	2,698	2,672	2,907	3,023	3,174	3,370	3,564	3,745	3.8	1.7	5.2
Total.....	23,339	27,120	29,721	32,333	32,933	33,549	34,172	34,760	35,293	2.4	1.7	1.8
Beneficiaries receiving reimbursed services:												
Aged.....	11,311	16,034	20,199	23,820	24,115	25,523	26,043	26,571	27,084	6.0	3.4	2.6
Disabled.....	797	1,669	1,933	2,184	2,276	2,531	2,702	2,872	3,031	9.3	2.5	6.8
Total.....	12,108	17,703	22,132	26,004	26,391	28,054	28,745	29,443	30,115	5.2	3.3	3.0

Average annual benefit per person enrolled: ²

Aged	\$153	\$347	\$705	\$1,250	\$1,342	\$1,407	\$1,571	\$1,779	\$2,001	16.5	12.1	9.9
Disabled	\$259	\$615	\$1,021	\$1,602	\$1,758	\$1,841	\$1,847	\$2,006	\$2,186	14.7	9.4	6.4
Total	\$161	\$374	\$733	\$1,282	\$1,380	\$1,448	\$1,598	\$1,802	\$2,021	16.3	11.8	9.5

¹ Represents current law. Does not include regulations or legislative proposals.² Does not include administrative cost.³ Includes Part A catastrophic benefits beginning in fiscal year 1989. There will be no catastrophic benefits after fiscal year 1990.

Source: Health Care Financing Administration, Division of Budget

TABLE 2.—BENEFIT PAYMENTS BY SERVICE UNDER MEDICARE PART A AND PART B FISCAL YEARS 1975, 1980, 1985, 1990, 1992, 1993, AND 1995

[Dollars in millions]

Fiscal year:	1975		1980		1985		1990		1992		1993 (est.) ¹		1995 (est.) ¹		Projected average annual growth (percent)		
	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	1975-85	1985-90	1990-95 ¹
Part A:																	
For inpatient hospital services	70.5	\$9,947	67.4		64.7		55.0	\$58,974	53.4	\$59,007	51.2	\$74,037	48.2	\$88,922	16.3	5.6	8.6
For skilled nursing facility services.....	1.9	273	1.1		0.8		2.6	2,781	2.9	3,692	3.3	4,822	3.2	5,873	7.6	37.3	16.1
For home health services .....	.9	133	1.6		3.0		3.4	3,646	5.5	7,077	7.0	10,083	9.1	16,792	31.9	11.5	35.7
For hospice services.....	0	0	0		0		0.3	320	0.6	808	0.8	1,094	0.9	1,584	NA	NA	37.7
Total benefit payments	73.3	10,353	70.1		68.6		61.3	\$65,721	62.4	\$80,584	62.2	\$90,036	61.3	\$113,171	16.5	6.6	11.5
Part B:																	
For physician services....	21.7	3,067	23.0		24.2		27.0	\$28,938	25.0	32,304	24.7	\$35,671	24.3	44,908	18.5	11.5	9.2
For outpatient services....	3.8	530	5.4		5.6		7.8	8,357	8.3	10,671	8.2	11,860	8.7	16,013	22.1	16.4	13.9
For other medical and health services	1.2	168	1.4		1.6		3.9	4,155	4.4	5,620	4.9	7,090	5.6	10,393	20.8	30.1	20.1
Total benefit payments	26.7	3,765	29.9		31.4		38.7	\$41,450	37.6	\$48,595	37.8	\$54,621	38.7	\$71,314	19.2	13.7	11.5
Total.....	100.0	14,118	100.0		100.0		100.0	\$107,171	100.0	\$129,179	100.0	\$144,657	100.0	\$184,485	17.3	9.0	11.5

¹ Represents projections of current law.

Source: Health Care Financing Administration, Division of Budget.

TABLE 3.—BENEFIT PAYMENTS BY SERVICE UNDER MEDICARE PART A AND PART B, FISCAL YEARS 1975 THROUGH 1994

[In millions of dollars]

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Part A										
For inpatient hospital services	9,947	11,742	14,265	16,685	19,072	22,850	27,751	32,720	36,075	39,080
For skilled nursing facility services	273	308	351	353	363	387	428	462	511	536
For home health service	133	217	289	361	437	539	715	1,161	1,516	1,841
For hospice services	0	0	0	0	0	0	0	0	0	4
Total benefit payments	10,353	12,267	14,905	17,399	19,872	23,776	28,894	34,343	38,102	41,461
Part B										
For physician services	2,874	3,438	4,286	4,953	5,948	7,283	8,860	10,649	12,890	14,581
For radiology and pathology services	193	251	313	373	449	531	654	743	609	615
For outpatient service	530	745	988	1,230	1,496	1,847	2,248	2,916	3,346	3,534
For other medical and health services	168	238	280	296	366	483	583	498	642	743
Total benefit payments	3,765	4,672	5,867	6,852	8,259	10,144	12,345	14,806	17,487	19,473
Total	14,118	16,939	20,772	24,251	28,131	33,920	41,239	49,149	55,589	60,934

TABLE 3.—BENEFIT PAYMENTS BY SERVICE UNDER MEDICARE PART A AND PART B, FISCAL YEARS 1975 THROUGH 1994—Continued

	[In millions of dollars]									
	1985	1986	1987	1988	1989	1990	1991	1992 ¹	1993 ¹	1994 ¹
Part A										
For inpatient hospital services	44,988	46,034	46,806	48,753	52,259	58,974	60,775	69,007	74,037	80,975
For skilled nursing facility services	570	579	623	717	2,253	2,781	2,495	3,692	4,522	5,519
For home health service	2,118	2,186	2,280	2,251	2,508	3,646	4,787	7,077	10,083	13,597
For hospice services	34	68	104	137	211	320	465	808	1,094	1,324
Total benefit payments	47,710	48,867	49,813	51,858	57,231	65,721	68,486	80,584	90,036	101,415
Part B										
For physician services	16,224	18,553	21,926	24,243	26,149	28,938	31,049	32,304	35,671	40,171
For radiology and pathology services	565	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
For outpatient service	3,903	4,922	5,780	6,456	7,329	8,357	9,232	10,671	11,860	13,891
For other medical and health services	1,116	1,694	2,231	2,983	3,388	4,155	5,175	5,620	7,090	8,583
Total benefit payments	21,808	25,169	29,937	33,682	36,866	41,450	45,456	48,595	54,621	62,545
Total	69,518	74,036	79,750	85,540	94,097	107,171	113,942	129,179	144,657	164,060

¹ Represents estimates of current law. Does not include legislative proposals. Includes catastrophic benefits, in fiscal years 1989 and 1990.² Not available. Physician services for fiscal years 1986 through 1994 include radiology and pathology services.

Source: Health Care Financing Administration, Division of Budget.

TABLE 4.—HISTORICAL AND PROJECTED AMOUNTS OF PART A (HOSPITAL INSURANCE) AND PART B (SMI) DEDUCTIBLE, COINSURANCE AND PREMIUMS ¹

For benefit periods beginning in calendar year	Inpatient hospital ²		Skilled nursing facility		HI monthly premium ⁶		SMI premium	
	First 60 days deductible	61st thru 90th day coinsurance per day ³	60 lifetime reserve days (non-renewable) coinsurance per day ⁴	21st thru 100th day coinsurance per day ⁵	Effective date	Amount	SMI deductible	Effective date
1966.....	\$40	\$10	(⁷)	(⁷)	.....	.....	\$50	7/66
1967.....	40	10	(⁷)	\$5.00	.....	.....	50	.....
1968.....	40	10	\$20	5.00	.....	.....	50	4/68
1969.....	44	11	22	5.50	.....	.....	50	.....
1970.....	52	13	26	6.50	.....	.....	50	7/70
1971.....	60	15	30	7.50	.....	.....	50	7/71
1972.....	68	17	34	8.50	.....	.....	50	7/72
1973.....	72	18	36	9.00	7/73	\$33	60	8 9/73
1974.....	84	21	42	10.50	7/74	36	60	7/74
1975.....	92	23	46	11.50	7/75	40	60	.....
1976.....	104	26	52	13.00	7/76	45	60	7/76
1977.....	124	31	62	15.50	7/77	54	60	7/77
1978.....	144	36	72	18.00	7/78	63	60	7/78
1979.....	160	40	80	20.00	7/79	69	60	7/79
1980.....	180	45	90	22.50	7/80	78	60	7/80
1981.....	204	51	102	25.50	7/81	89	60	7/81
1982.....	260	65	130	32.50	7/82	113	75	7/82
1983.....	304	76	152	38.00	.....	113	75	.....
1984.....	356	89	178	44.50	1/84	155	75	1/84
1985.....	400	100	200	50.00	1/85	174	75	1/85

TABLE 4.—HISTORICAL AND PROJECTED AMOUNTS OF PART A (HOSPITAL INSURANCE) AND PART B (SMI) DEDUCTIBLE, COINSURANCE AND PREMIUMS ¹—Continued

For benefit periods beginning in calendar year	Inpatient hospital ²			Skilled nursing facility		HI monthly premium ⁶		SMI premium	
	First 60 days deductible	61st thru 90th day coinsurance per day ³	60 lifetime reserve days (non-renewable) coinsurance per day ⁴	21st thru 100th day coinsurance per day ⁵	Effective date	Amount	SMI deductible	Effective date	Amount
1986.....	492	123	246	61.50	1/86	214	75	1/86	15.50
1987.....	520	130	260	65.00	1/87	226	75	1/87	17.90
1988.....	540	135	270	67.50	1/88	234	75	1/88	24.80
1989.....	⁹ 560	NA	NA	¹⁰ 25.50	1/89	156	75	1/89	31.90
1990.....	592	148	296	74.00	1/90	175	75	1/90	28.60
1991.....	628	157	314	78.50	1/91	177	100	1/91	29.90
1992.....	652	163	326	81.50	1/92	192	100	1/92	31.80
1993.....	676	169	338	84.50	1/93	221	100	1/93	36.60
1994 ¹¹	720	180	360	90.00	1/94	254	100	1/94	41.10
1995 ¹¹	768	192	384	96.00	1/95	280	100	1/95	46.10
1996 ¹¹	816	204	408	102.00	1/96	306	100	1/96	47.80
1997 ¹¹	868	217	434	108.50	1/97	330	100	1/97	49.60
1998.....	920	230	460	115.00	1/98	357	100	1/98	51.40

¹ For services furnished on or after January 1, 1982, the coinsurance amounts are based on the inpatient hospital deductible for the year in which the services were furnished. For services furnished prior to January 1, 1982, the coinsurance amounts are based on the inpatient hospital deductible applicable for the year in which the individual's benefit period began.

² For care in psychiatric hospital—190 day lifetime limit.

³ Always equal to 1/4 of inpatient hospital deductible through 1988, and for 1990 and later, eliminated for 1989.

⁴ Always equal to 1/2 of inpatient hospital deductible through 1988, and for 1990 and later, eliminated for 1989.

⁵ Always equal to 1/6 of inpatient hospital deductible through 1988 and for 1990 and later. For 1989 it was equal to 20 percent of estimated Medicare covered average cost per day.

⁶ Not applicable prior to July 1973. Applies to individuals who are not fully insured.

⁷ Not covered.

⁸ For August 1973 the premium was \$6.10.

⁹ In 1989, the HI deductible was applied on an annual basis, not a benefit period basis (unlike the other years).

¹⁰ In 1989, the SNF coinsurance was on days 1-8 of the 150 days allowed annually; for the other years it is on days 21-100 of 100 days allowed per benefit period.

¹¹ Administration projections under current law using fiscal year 1994 budget assumptions.

Note.—In addition to the deductible and coinsurance amounts shown in the table, the first 3 pints of blood are not reimbursed by Medicare. Currently there is no deductible or coinsurance on home health benefits. From January 1973 to June 30, 1982, there was a \$60 annual deductible and prior to July 1, 1981, benefits were limited to 100 visits per benefit period under part A and 100 visits per calendar year under part B. Special limits apply to certain benefits: (1) Outpatient physician services for mental illness; 50 percent of approved charges, up to a maximum of \$250 in benefits per year; July 1, 1966, through December 31, 1987; \$450 in benefits per year, January 1, 1988, through December 31, 1988; \$1,100 in benefits per year, January 1, 1989, through December 31, 1989; beginning January 1, 1990, the limit was removed; (2) physical and occupational therapy services furnished by physical therapists in independent practice: maximum annual approved charges July 1, 1973, through December 31, 1981, \$80 per year; January 1, 1982, through December 31, 1982, \$400 per year; and January 1, 1983, through December 31, 1989, \$500 per year; January 1, 1990, and thereafter \$750 per year.

Source: Health Care Financing Administration, Office of the Actuary, Office of Medicare and Medicaid Cost Estimates.

COVERAGE

Most individuals establish entitlement to part A on the basis of work in employment covered by either the Social Security or railroad retirement systems. Certain employment is excluded from Social Security (including part A hospital insurance) taxation.

The Tax Equity and Fiscal Responsibility Act of 1982 extended the hospital insurance tax to Federal employment effective with respect to wages paid on or after January 1, 1983. Beginning January 1, 1983, Federal employment is used to determine eligibility for protection under Medicare part A. A transitional provision allows individuals who are in the employ of the Federal Government both before and during January 1, 1983, to have their prior Federal employment considered as employment for purposes of providing Medicare coverage. Newly hired employees of State and local governments hired after March 31, 1986, are liable for the HI tax.

BENEFITS

Part A of Medicare will pay for:

1. *Inpatient hospital care.*—All reasonable expenses for the first 60 days minus a deductible (\$676 in calendar year 1993) in each benefit period. For days 61–90, a coinsurance amount (\$169 in calendar year 1993) is deducted. When more than 90 days are required in a benefit period, a patient may elect to draw upon a 60 day lifetime reserve. A coinsurance amount (\$338 in calendar year 1993) is also deducted for each reserve day.

2. *Skilled nursing facility care.*—Up to 100 days (following hospitalization) in a skilled nursing facility for persons in need of continued skilled nursing care and/or skilled rehabilitation services on a daily basis. After the first 20 days, there is a daily coinsurance amount deducted (\$84.50 in calendar year 1993).

3. *Home health care.*—Home health visits provided to persons who need skilled nursing care, physical therapy, or speech therapy on an intermittent basis.

4. *Hospice care.*—Hospice care services provided to terminally ill Medicare beneficiaries with a life expectancy of 6 months or less up to a 210-day lifetime limit. A subsequent period of hospice coverage is allowed beyond the 210-day limit if the beneficiary is recertified as terminally ill.

Part B of Medicare generally pays 80 percent of the approved amount (fee schedule, reasonable charges, or reasonable cost) for covered services in excess of an annual deductible (\$100). Services covered include the following:

1. *Doctor's services.*—Including surgery, consultation, and home, office and institutional visits. Certain limitations apply for services rendered by dentists, podiatrists and chiropractors and for the treatment of mental illness.

2. *Other medical and health services.*—Laboratory and other diagnostic tests, X-ray and other radiation therapy, outpatient services at a hospital, rural health clinic services, home dialysis supplies and equipment, artificial devices (other than dental), physical and speech therapy, and ambulance services.

3. *Home health services.*—Unlimited number of medically necessary home health visits for persons not covered under part A. The

20 percent coinsurance and \$100 deductible do not apply for such benefits.

Table 4 illustrates the deductible, coinsurance and premium amounts for both part A and part B services from the inception of Medicare.

ADMINISTRATION

Responsibility for administration of the Medicare program has been delegated by the Secretary of Health and Human Services to the Administrator of the Health Care Financing Administration (HCFA). Much of the day-to-day operational work of the program is performed by "intermediaries" and "carriers" which have responsibility for reviewing claims for benefits and making payments.

In general, hospitals and other providers paid under part A of Medicare can nominate, subject to HCFA's approval, a national, State, or other public or private agency to serve as a fiscal intermediary between themselves and the Federal Government.

The Secretary enters into contracts with insurance organizations to serve as carriers. The carrier must perform its obligations under the contract efficiently and effectively and must meet such requirements as to financial responsibility, legal authority, and other matters as the Secretary finds pertinent. The carrier must ensure that payments made to providers under part B on a reasonable cost or reasonable charge basis (as may be applicable) are reasonable.

Medicare administrative costs in 1991 amount to approximately 2.5 percent of program outlays.

Hospitals

The Social Security Amendments of 1983 (Public Law 98-21) altered the way in which Medicare pays hospitals. From the inception of the program, Medicare had paid hospitals on a "reasonable cost" basis. Effective October 1, 1983, Medicare began paying under a prospective payment system. Medicare payments for inpatient operating costs of hospitals are determined in advance and made on a per discharge basis. A fixed amount per case is paid based upon the type of case or "diagnosis-related group" (DRG) into which the case is classified.

The payment system is not applied to direct medical education costs and certain other costs. These expenses continue to be reimbursed on a reasonable cost basis. Certain hospitals are excluded from the system: psychiatric, long-term care, children's and rehabilitation hospitals. Excluded hospitals continue to be paid based on reasonable costs subject to certain rate of increase limitations.

Additional payments are made for extraordinarily costly cases, for the indirect costs of medical education, and for hospitals serving a disproportionate share of low income patients. An adjustment is made for the wage level in the area in which the hospital is located. In addition, there are certain other exceptions and adjustments including those for sole community providers, national and regional referral centers, and cancer treatment centers.

The prospective payment system was phased in over 4 years from payments based on an individual hospital's historical costs to payments based on the new payment rates. In addition, the system

was phased in from payments representing nine regional payment levels to one national payment level for each DRG. There are separate payment levels for large urban, other urban, and rural areas. OBRA 1990 (P.L. 101-508) included a phaseout of the other urban/rural payment differential designed to eliminate the different payment levels for other urban and rural hospitals by fiscal year 1995. Once the phaseout is complete, there will be two payment levels for large urban and other rural hospitals.

Hospitals and other institutional providers receiving payment under Medicare part A submit bills on behalf of the beneficiary and agree to accept the program's payment as payment in full. In general, providers are permitted to charge beneficiaries only the deductible and coinsurance amounts authorized by law.

Physicians

Medicare part B provides insurance coverage for physician services and for certain other medical services. To be entitled to benefits under Medicare part B, individuals must enroll in part B and pay a monthly premium.

Payments are made for services covered under part B after an annual deductible requirement of \$100 has been satisfied. Payment is set at 80 percent of the Medicare fee schedule amount. Beneficiaries are responsible for the remaining 20 percent as coinsurance.

Beginning January 1, 1992, a new payment system is being phased in over 5 years. It is based on a fee schedule that assigns relative values to services. Relative values reflect three things: physician work (time, skill and intensity involved in the service), practice expenses, and malpractice costs. These relative values are adjusted for geographic variations in the costs of practicing medicine. These adjusted relative values are then converted into a dollar payment amount by a conversion factor.

Medicare payment is made either on an "assigned" or "unassigned" basis. By accepting assignment, physicians agree to accept the Medicare approved amount as payment in full. Thus, if assignment is accepted, beneficiaries are not liable for any out-of-pocket costs other than standard deductible and coinsurance payments. In contrast, if assignment is not accepted, beneficiaries may be liable for charges in excess of the Medicare approved charge, subject to certain limits. This is known as balance billing.

Medicare's participating physician program was established in 1984 to provide beneficiaries with the opportunity to select physicians who have agreed to accept assignment on all services provided during a 12-month period. Nonparticipating physicians continue to be able to accept or refuse assignment on a claim-by-claim basis. A number of incentives are provided to encourage physicians to sign participation agreements. These include: higher payment levels, more rapid claims payment, and widespread distribution of participating physician directories.

Beginning in 1993, nonparticipating physicians are not allowed to charge more than 115 percent of Medicare's allowed amount for any service. Medicare's allowed amount for nonparticipating physicians is set at 95 percent of that for participating physicians. Thus, nonparticipating physicians will only be able to bill 9.25 percent

(115 percent times 95 percent) over the approved amount recognized for participating physicians.

To provide incentives for physicians to get involved in efforts to stem expenditure increases, the law requires the calculation of annual Medicare volume performance standards (MVPSs), which are standards for the rate of expenditure growth. The relationship of actual expenditures to the MVPS is one factor used in determining the annual update in the conversion factor in a subsequent year.

TABLE 5.—PARTICIPATING INSTITUTIONS AND ORGANIZATIONS (JUNE 1984, 1989, 1990, 1991 AND 1992)

	1984	1989	1990	1991	1992
Hospitals.....	6,675	6,508	6,520	6,487	6,457
Short stay.....	6,038	5,582	5,549	5,480	5,427
Long stay.....	637	926	971	1,007	1,030
Skilled nursing facilities.....	5,952	8,198	8,937	9,674	10,589
Home health agencies.....	4,684	5,546	5,730	5,826	6,175
Independent laboratories.....	3,801	4,613	4,879	4,926	7,526
Outpatient physical therapy providers.....	791	1,082	1,195	1,317	1,435
Portable X-ray suppliers.....	269	418	443	462	473
Rural health clinics.....	420	484	551	692	899
Comprehensive outpatient rehabilitation facilities.....	48	170	186	193	207
Ambulatory surgical centers.....	155	1,096	1,197	1,335	1,476
Hospices.....	108	703	825	1,057	1,199
Facilities providing services to renal disease beneficiaries ...	1,335	1,888	1,992	2,130	2,269
Hospitals certified as both renal transplant and renal dialysis centers.....	147	164	166	168	166
Hospitals certified as renal transplant centers.....	16	50	52	58	65
Hospital dialysis facilities.....	117	163	174	198	212
Non-hospital renal dialysis facilities.....	645	1,121	1,217	1,320	1,430
Dialysis centers only.....	359	332	1,882	331	337
Inpatient care.....	51	58	52	55	59
Hospital and skilled nursing facility beds:					
Hospitals.....	1,144,142	1,103,359	1,104,574	1,101,823	1,096,647
Short stay.....	1,023,465	973,013	970,480	966,577	960,616
Long stay.....	120,677	130,346	134,094	135,246	136,031
Skilled nursing facilities..	530,403	492,999	508,585	567,199	597,234

Source: Health Care Financing Administration, BDMS, Decision Support Division.

A program to measure outcomes and effectiveness of the new system has been established. (Additional information concerning physician payment is included in appendix E.)

Table 5 above shows the number of participating institutions and organizations.

END STAGE RENAL DISEASE PROGRAM

The Medicare program covers individuals who suffer from end stage renal disease, if they are (1) fully insured for old age and survivor insurance benefits, or (2) are entitled to monthly social security benefits, or (3) are spouses or dependents of individuals described in (1) or (2). Such persons must be medically determined to be suffering from end stage renal disease and must file an application for benefits. Approximately 7 percent of the population suffering from end stage renal disease (ESRD) do not meet any of these requirements and thus is not covered for Medicare renal benefits.

Benefits for qualified end stage renal disease beneficiaries include all part A (hospital insurance) and part B (supplementary medical insurance) medical items and services. ESRD beneficiaries are automatically enrolled in the part B portion of Medicare and must pay the monthly premium for such protection.

Table 6 shows estimates of expenditures, number of beneficiaries, and the average expenditure per person from 1974 through 1998. Total projected program expenditures for Medicare end stage renal disease program for fiscal year 1992 are estimated at \$6.1 billion. In fiscal year 1992, there were an estimated 174,454 ESRD beneficiaries, including successful transplant patients, and also including persons entitled to Medicare on the basis of disability who also have ESRD.

When the ESRD program was created, it was assumed that program enrollment would level out at about 90,000 enrollees by 1995. That mark was passed several years ago, and no indication exists that enrollment will stabilize soon.

TABLE 6.—ESRD MEDICARE BENEFICIARIES AND PROGRAM EXPENDITURES

[Expenditures in millions]

Fiscal year	Expenditures (HI & SMI)	HI beneficiaries	Per person
1974.....	\$229	15,993	\$14,319
1975.....	361	22,674	15,921
1976.....	512	28,941	17,691
1977.....	641	35,889	17,861
1978.....	800	43,482	18,398
1979.....	1,010	52,636	19,188
1980.....	1,250	55,509	22,519
1981.....	1,472	61,930	23,769
1982.....	1,651	69,552	29,738
1983.....	1,994	78,642	25,355
1984.....	2,336	87,929	26,567
1985.....	2,684	97,200	27,613
1986.....	3,141	106,633	29,456
1987.....	3,465	116,937	29,631
1988.....	3,890	127,487	30,513
1989.....	4,572	139,132	32,861
1990.....	5,072	152,541	33,250
1991.....	5,641	164,354	34,322
1992.....	6,079	174,454	34,846
1993.....	6,627	184,257	35,966
1994.....	7,323	194,201	37,708
1995.....	8,126	204,310	39,773
1996.....	9,030	214,564	42,085
1997.....	10,016	224,926	44,530
1998.....	11,104	225,351	47,181

Note: Estimates for 1983-98 are subject to revision by the Office of the Actuary, Office of Medicare and Medicaid Cost Estimates; projections for 1993-98 are under the fiscal year 1994 budget assumptions.

Source: Office of the Actuary, Health Care Financing Administration, Department of Health and Human Services, for fiscal years 1983-98.

Table 7 shows that new enrollment grew an average annual rate of 9.6 percent from 1980 to 1990. Most of the growth in program participation is attributable to growth in the numbers of elderly people receiving services and growth in the numbers of more seriously ill people entering treatment. Table 7 shows the greatest rate of growth in program participation is in people over age 75, at 18.7 percent, followed by the second highest rate of growth in people ages 65 to 74 years old. This age group exhibited a growth rate of 12.7 percent. The largest rate of growth in primary causes of people entering ESRD treatment was diabetes. People with diabetes frequently have multiple health problems, making treatment for renal failure more difficult.

TABLE 7.—MEDICARE END STAGE RENAL DISEASE PROGRAM NEW ENROLLMENTS BY AGE AND PRIMARY DIAGNOSIS: 1980-90

Age and primary diagnosis		1980	1985	1986	1987	1988	1989	1990	Average annual percent change	Percent change 1989-1990
Number of new enrollees:										
Total.....		18,404	29,718	31,935	34,848	37,824	42,382	45,871	9.6	8.2
Age:										
Under 15 years.....		374	415	422	429	400	402	456	2.0	13.4
15-24 years.....		1,091	1,183	1,183	1,234	1,256	1,303	1,242	1.3	-4.7
25-34 years.....		2,092	2,717	2,985	2,845	3,074	3,379	3,395	5.0	0.5
35-44 years.....		2,244	3,395	3,657	3,979	4,321	4,685	5,082	8.5	8.5
45-54 years.....		3,167	4,245	4,438	4,880	5,367	5,874	6,155	6.9	4.8
55-64 years.....		4,346	6,967	7,191	7,832	8,375	8,995	9,645	8.3	7.2
65-74 years.....		3,746	7,228	7,883	8,882	9,569	11,103	12,421	12.7	11.9
75 years and over.....		1,344	3,568	4,176	4,767	5,462	6,641	7,475	18.7	12.6
Diagnosis:										
Diabetes.....		2,225	8,282	9,404	10,417	11,605	14,024	15,634	21.5	11.5
Glomerulonephritis.....		2,208	4,589	4,720	4,949	5,193	5,589	5,677	9.9	1.6
Hypertension.....		2,453	7,570	8,004	9,136	10,217	11,973	12,988	18.1	8.5
Polycystic-kidney disease.....		602	1,161	1,219	1,242	1,242	1,262	1,386	8.7	9.8
Other/unknown.....		10,916	8,116	8,588	9,104	9,567	9,534	10,186	-0.7	6.8

Source: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Program Management and Medical Information System, April 1992 update.

The rates of growth in older and sicker patients entering treatment for end stage renal disease indicate a shift in physician practice patterns. In the past, most of these people would not have entered dialysis treatment because their age and severity of illness made successful treatment for renal failure less likely. Although the reasons that physicians have begun treating older and sicker patients are not precisely known, it is clear that these practice patterns have, and will continue, to result in steady growth in the numbers of patients enrolling in Medicare's end stage renal program.

End stage renal disease is invariably fatal without treatment. Treatment for the disease takes two forms: transplantation and dialysis. Although the capability to perform transplants had existed since the 1950's, problems with rejection of transplanted organs limited its application as a treatment for renal failure. The 1983 introduction to the market of a powerful and effective immunosuppressive drug, cyclosporine, resulted in a dramatic increase in the numbers of transplants being performed and the success rate of transplantation.

Table 8 indicates that the number of transplants in 1991 was more than double the number performed in 1980. The number of transplants performed increased steadily through 1986. The rate of successful transplantation has increased even more dramatically; from 1980 to 1989, the number of Medicare patients with successful transplants increased at an average annual rate of 17.2 percent. Despite the significant increases in the number and success of kidney transplants, transplantation will not be the treatment of choice for all ESRD patients. A chronic, severe shortage of kidneys available for transplantation now limits the number of patients who can receive transplants. Even absent a shortage of organs, some patients are not suitable candidates for transplants because of their age, severity of illness or other complicating conditions. And some ESRD patients do not want an organ transplant.

For all of these reasons, dialysis is likely to remain the primary treatment for end stage renal disease. Dialysis is an artificial method of performing the kidney's function of filtering blood to remove waste products. There are two types of dialysis: hemodialysis and peritoneal dialysis. In hemodialysis, still the most common form of dialysis, blood is removed from the body, filtered and cleansed through a dialyzer, sometimes called an artificial kidney machine, before being returned to the body. Peritoneal dialysis does not require use of a machine. Instead, filtering takes place inside the body by inserting dialysate fluid through a permanent surgical opening in the peritoneum (abdominal cavity). Toxins filter into the dialysate fluid and are then drained from the body through the surgical opening. To be effective, both types of dialysis generally need to be performed several times a week, usually three times.

TABLE 8.—TOTAL KIDNEY TRANSPLANTS PERFORMED IN MEDICARE CERTIFIED U.S. HOSPITALS

Calendar year	Total transplants	Living donor		Cadaveric donor	
		Number	Percent	Number	Percent
1979	4,189	1,186	28	3,003	72
1980	4,697	1,275	27	3,422	73
1981	4,883	1,458	30	3,425	70
1982	5,358	1,677	31	3,681	69
1983	6,112	1,784	29	4,328	71
1984	6,968	1,704	24	5,364	76
1985	7,695	1,876	24	5,819	76
1986	8,976	1,887	21	7,089	79
1987	8,967	1,907	21	7,060	79
1988	8,932	1,760	20	7,116	80
1989	8,899	1,893	21	7,006	79
1990	9,796	2,091	21	7,705	79
1991	10,026	2,382	24	7,644	76

Source: HCFA, BDMS, Division of Special Programs.

Since 1983, Medicare has reimbursed outpatient maintenance dialysis on the basis of a fixed rate which is adjusted to reflect the proportion of patients dialyzing at home. Separate rates are established for hospitals and for independent, or free-standing, facilities. Both rates were originally derived from audited costs; both are divided into nonlabor and labor components. The labor component is adjusted by a wage index to reflect differences in wages. In addition, the hospital rate contains two additional adjustments which result in slightly higher rates. One adjustment consists of a 5 percent add-on to the overall rate to account for possible data collection errors, and the second adjustment consists of a \$2.10 add-on per treatment to account for hospitals' additional overhead. The fixed rate is paid for each treatment.

When this rate structure was implemented in 1983, HCFA estimated that the average payment for independent facilities would be around \$127 per treatment and the average payment to hospitals would be approximately \$131. In 1986, HCFA proposed to lower the rates, based on 1983 audit data which showed declining costs. The rates HCFA proposed to implement would have resulted in an average rate of \$115.40 for independent facilities and an average rate of \$119.70 for hospital-based facilities. OBRA 1986 preempted the implementation of these rates by reducing each rate by \$2.00. In OBRA 1989, Congress required that these rates be maintained until October 1, 1990. OBRA 1990 increased rates by \$1, effective January 1, 1991.

The effect of a dialysis rate that has been either fixed or declining since 1983 is less real spending per enrollee on dialysis services. Adjusting for inflation, dialysis reimbursement rates were nearly 65 percent lower in 1991 than they were in 1974. Considerable evidence documents increasing efficiency and lower costs associated with dialysis, but concerns that the rates have adversely affected

quality and access to care remain. In OBRA 1987, Congress authorized the Institute of Medicine to conduct a comprehensive study of the ESRD program and the effects of the composite rate.

The Institute of Medicine (IOM) study required by OBRA 1987 was submitted to Congress in April 1991. As part of its mandate, the IOM examined several indicators of quality (mortality, morbidity, and dialysis staffing patterns). The IOM also examined the dialysis rate structure, commented on its implications for quality, and made a number of recommendations regarding ESRD dialysis rates. It found no conclusive evidence linking the composite rate to declining quality of care, as measured by mortality and morbidity. Nevertheless, the IOM suggested that there might be an indirect effect on quality of care due to the composite rate structure. It recommended modifications to the current rate structure, including updating the rates yearly and rebasing the rate structure after a comprehensive quality assurance program is established. It also recommended against further reductions in the composite rate and against rebasing the rate using current audit data because, in its opinion, current costs may not include all services providers deem medically appropriate.

Recent changes

Dialysis payment rates.—OBRA 1989 mandated the continuance of the dialysis rates then in effect until October 1, 1990. In addition, it required the Secretary to follow standard regulatory procedures when proposing rate changes. OBRA 1990 increased the dialysis rates in effect on September 30, 1990, by \$1 for services provided on or after January 1, 1991.

OBRA 1990 also directed the Prospective Payment Assessment Commission (ProPAC) to conduct a study to determine the costs, services and profits associated with various dialysis treatment modalities. The Commission was also required to make recommendations to Congress by June 1, 1992, on methods and levels of reimbursement for dialysis services. In its June 1992 report, ProPAC indicated that it has adopted an incremental approach to evaluating payment method and level and developing an update. The Commission will evaluate several options for unit of payment, including looking at larger bundles of services across longer time periods, recalculating base rates using more recent data, and using site of service and modality to determine payment.

In addition to this study, OBRA 1990 directed ProPAC to make a recommendation to Congress on an appropriate factor to be used in updating payments for services. ProPAC is to submit its recommendations to Congress by March 1 of each year for the succeeding fiscal year, with the first recommendation due March 1, 1992.

In its March 1992 Report to Congress, ProPAC did not recommend an increase in payments for dialysis services for fiscal year 1993. Its reasoning for not recommending an increase in dialysis payment rates was that data are inadequate to assess the relationship between payments and the costs of furnishing dialysis in different settings. ProPAC recommended that the Health Care Financing Administration (HCFA) expedite work necessary to obtain a complete data base of dialysis facility cost reports and that HCFA

annually audit the cost reports of a representative sample of dialysis facilities.

Limitation of method II payments for home dialysis.—In January 1989, HCFA proposed to limit payments (called method II payments) to suppliers who deal directly with Medicare beneficiaries rather than providing supplies through an approved Medicare dialysis facility. HCFA's proposed rule was in response to information that one supplier received monthly payments nearly twice as high as facilities received for dialyzing patients, either in-facility or at home. These rules were not implemented.

Subsequently, the General Accounting Office conducted a study of method II payments. GAO concluded that the differential in payments between method I (payments to dialysis facilities for home dialysis patients) and method II suppliers was not justified. Shortly after GAO's report was released, Congress incorporated GAO's recommendations by enacting a payment limit on method II payments in OBRA 1989. The new limit is 100 percent of the median dialysis rate paid to hospital-based facilities. In the case of home patients on continuous cycling peritoneal dialysis (CCPD), the limit is 130 percent of the median hospital-based dialysis rate. The payment limit took effect on February 1, 1990.

Staff-assisted home dialysis demonstration project.—In response to continuing congressional concerns about some home dialysis patients' needs for staff assistance after the limitation on method II payments was imposed, OBRA 1990 established a 3-year demonstration project to determine whether Medicare coverage of staff assistants could be both cost effective and safe for patients. The demonstration was to begin within 9 months of OBRA 1990's enactment for a maximum of 800 participants. The law defines staff assistant services as including: technical assistance with operating the hemodialysis machine and care of patients during home dialysis; and administration of medications in patients' homes. Home dialysis staff assistants must meet minimum requirements specified by the Secretary and any State requirements applicable in the State where the staff assistant practices.

The law establishes rather stringent patient eligibility criteria designed to assure that the demonstration is limited to patients whose health status precludes travel to a dialysis facility and whose family members are not able to assist them with home dialysis.

Payments to an ESRD provider or dialysis facility participating in the demonstration project are to be prospectively determined by the Secretary, made on a per treatment basis, and paid as an add-on to the dialysis rate. OBRA 1990 provides detailed instructions on calculating the payment rate for staff assistants. The payment structure is designed to prevent duplicate payments for labor costs, since the dialysis rate structure already includes labor costs associated with providing in-facility dialysis.

OBRA 1990 provided funding of \$4 million in fiscal years 1991 and 1992 for the demonstration; \$3 million in fiscal year 1993; \$2 million in fiscal year 1994; and \$1 million in fiscal year 1995. The Secretary is directed to submit a preliminary report on the status of the demonstration by December 1, 1992, and a final report by December 31, 1995. The final report is to evaluate the demonstra-

tion project and include recommendations regarding eligibility criteria and cost-control mechanisms for providing Medicare coverage of home dialysis aides.

Reimbursement for epoetin.—On June 1, 1989 the U.S. Food and Drug Administration (FDA) approved marketing of a drug used to treat anemia associated with chronic renal failure. The drug, epoetin, is a genetically engineered copy of a protein (erythropoietin or EPO) that the body uses to stimulate production of red blood cells. EPO is used as a substitute for transfusions. Medicare began reimbursing for the drug for chronic renal failure patients with a specified level of anemia in 1989. Chronic renal failure patients may include those not on dialysis or transplant patients as long as they have the specified level of anemia.

In a break with longstanding policy, Medicare's reimbursement rate for EPO was negotiated in advance of FDA approval and was set at about 80 percent of the anticipated market price. Concern about the eventual costs that EPO would add to ESRD expenditures played a major role in HCFA negotiation of a Medicare reimbursement rate below market price.

Reimbursement for the drug varies by the setting in which it is administered. If administered in an approved ESRD facility (either a hospital or an independent facility), payment is made as an add-on to the dialysis rate. For each administration of the drug of less than 10,000 units, the additional payment was initially set at \$40. For patients requiring more than 10,000 units, a payment of \$30 was initially made, which was an addition to the \$40 payment. The maximum payment was \$70.

Physicians receiving monthly capitation payments for providing services to ESRD patients are reimbursed for drug costs but are not given any additional reimbursement for administering the drug. However, they are reimbursed an additional \$2 per treatment for supplies, such as syringes. HCFA suggested that reimbursement for actual drug costs be based on drug prices reported in the Drug Topics red book, blue book or Medispan manuals, although, as a matter of practice, some carriers reimburse drug costs based on actual invoices.

Prior to implementing Medicare coverage of EPO, budget estimators had no reliable basis on which to estimate the number of ESRD patients who would use it. HCFA's preliminary estimate was that about 25 percent (25,000 to 30,000) of dialysis patients would use it in the first year of coverage, but that approximately 80 percent (75,000 to 80,000) of dialysis patients would use it by 1994 or 1995. The total yearly costs of providing the drug per user were estimated at \$5,600, with Medicare paying \$4,480 and the remaining \$1,120 paid by other insurers or beneficiaries.

Medicare claims for dialysis patients processed for December 1991 indicate that the dose per treatment averaged about 3,399 units. A total of 75,845 ESRD patients received EPO that month. Medicare payments for EPO in December 1991 were \$35.2 million.

OBRA 1990 revised payments made to dialysis facilities for EPO by establishing payment rates per 1,000 unit increments; abolishing the \$70 payment cap; and indexing EPO payment rates for subsequent years. Effective January 1, 1991, payments to dialysis facilities for EPO were limited to \$11 per 1,000 unit increments, round-

ed to the nearest 100 units. In 1992 and subsequent years, payment rates for EPO are increased by the percentage increase (if any) in the implicit price deflator for the gross national product (GNP). No changes were made to the method of reimbursing physicians for administration of the drug.

OBRA 1990 also extended coverage for self-administration of EPO to home dialysis patients if they are competent to administer it without medical or other supervision. The Secretary is to develop methods and standards to determine who is competent to self-administer the drug. Payments for EPO on behalf of home dialysis patients who self-administer EPO are made on the same basis as payments to facilities. This includes payments to suppliers on behalf of method II patients. Coverage for self-administration of EPO became effective for services provided on or after July 1, 1991.

Medicare spending for ESRD services

Table 9 shows overall per capita Medicare spending by type of ESRD patient from 1985-90. There are four types of ESRD patients: (1) dialysis patients, (2) transplant patients, (3) functioning graft (successful transplant) patients, and (4) graft failure (failed transplant) patients. Dialysis patients are those on dialysis during the year in question. Transplant patients are those who received a transplant during that year. Functioning graft patients are recipients of successful transplants performed during a previous year, and graft failure patients are those who received a transplant during a prior year, but whose transplants failed during the year in question.

Per capita spending for ESRD patients averaged \$29,497 in 1990 for patients who had at least 1 full year of Medicare entitlement in the prior year. Thus, these expenditure data exclude patients for whom Medicare was a secondary payer. Spending varied significantly by type of patient. Patients with successful transplants had the lowest average annual expenditures at \$6,930, followed by dialysis patients at \$33,165. Patients whose transplants failed had higher annual costs at \$39,333. The highest costs were reported for patients who had a transplant during the year in question; their 1990 per capita costs were reported at \$79,955. If their transplants are successful over the long run, however, these patients are ultimately less expensive to serve because they no longer need either expensive acute care or chronic dialysis services.

TABLE 9.—MEDICARE END-STAGE RENAL DISEASE PROGRAM EXPENDITURES BY PATIENT TREATMENT GROUP, EXCLUDING MEDICARE SECONDARY PAYER PATIENTS: ¹ 1985-90

Treatment group	1985	1986	1987	1988	1989	1990	Average annual percent change
Total number of patients	90,975	99,769	108,474	119,885	132,001	144,597	9.7
Expenditures (per person):							
Total	\$23,479	\$24,957	\$25,501	\$25,879	\$27,823	\$29,497	4.7
Inpatient	10,177	11,087	11,190	11,429	12,555	13,065	5.1
Outpatient	8,774	8,999	9,057	8,929	8,917	9,831	2.3
Physician/supplier	4,392	4,737	5,122	5,383	6,182	6,331	7.6
Other ²	136	134	132	139	170	271	14.8
Dialysis							
Number of patients	72,946	78,228	83,751	91,904	100,926	110,195	8.6
Expenditures (per patient):							
Total	\$25,007	\$26,700	\$27,891	\$28,716	\$31,159	\$33,165	5.8
Inpatient	9,644	10,443	10,890	11,429	12,831	13,341	6.7
Outpatient	10,355	10,810	11,040	10,963	10,984	12,167	3.3
Physician/supplier	4,852	5,296	5,812	6,165	7,149	7,344	8.6
Other ²	155	152	149	158	196	313	15.1
Transplant							
Number of patients	3,288	3,876	3,729	3,787	3,792	4,379	5.9
Expenditures:							
Total	\$61,669	\$68,036	\$70,559	\$72,051	\$76,435	\$79,955	5.3
Inpatient	46,130	51,731	53,128	53,622	57,135	59,878	5.4
Outpatient	8,039	8,270	8,597	8,895	8,886	9,664	3.8
Physician/supplier	7,426	7,936	8,731	9,417	10,290	10,221	6.6
Other ²	73	99	104	117	124	191	21.2

TABLE 9.—MEDICARE END-STAGE RENAL DISEASE PROGRAM EXPENDITURES BY PATIENT TREATMENT GROUP, EXCLUDING MEDICARE SECONDARY PAYER PATIENTS: ¹ 1985-90—Continued

Treatment group	1985	1986	1987	1988	1989	1990	Average annual percent change
Functioning Graft							
Number of patients	13,788	16,627	19,721	22,843	25,657	28,404	15.6
Expenditures:							
Total	\$5,733	\$6,160	\$6,184	\$6,138	\$6,756	\$6,930	3.9
Inpatient	3,901	4,120	3,935	3,817	4,184	4,250	1.7
Outpatient	621	694	754	780	826	823	5.8
Physician/supplier	1,157	1,287	1,431	1,476	1,668	1,734	8.4
Other ²	54	59	65	65	78	123	17.9
Graft Failure							
Number of patients	953	1,038	1,273	1,351	1,626	1,619	11.2
Expenditures:							
Total	\$31,436	\$33,802	\$35,541	\$37,304	\$39,837	\$39,333	4.6
Inpatient	17,666	19,416	20,534	21,812	23,502	22,316	4.8
Outpatient	8,190	8,293	8,572	8,486	8,425	9,333	2.6
Physician/supplier	5,507	5,932	6,333	6,897	7,782	7,525	6.4
Other ²	74	161	103	109	128	159	16.5

¹ Expenditures were calculated only for persons who had at least one full year of Medicare entitlement prior to the observation year. Thus, any patients for whom Medicare was a secondary payer were not included.

² Other includes skilled nursing facility and home health services.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Program Management and Medical Information System, and the Medicare Automated Data Retrieval System, April 1992 update, 1985-90.

HOME HEALTH

The hospital insurance (part A) and the supplementary medical insurance (part B) programs cover home health visits for persons who need skilled nursing care on an intermittent basis or physical therapy or speech therapy. Persons must also be homebound. The home health benefit is not subject to deductibles or copayments. When an individual is covered under parts A and B of the Medicare program, the individual will generally receive payment for home health services under part A of the program. In 1991, Medicare covered an average of 42 home health visits for persons who qualified for the benefit.

Reimbursement to home health agencies is based on Medicare rules for reasonable cost reimbursement. However, home health agencies are required to use the cost per visit by type of service for apportioning costs. Under this method, the total allowable costs of all visits for each type of service (skilled nursing, home health aide, etc.) is divided by the total number of visits by type of service. These average cost per visit amounts are multiplied by the number of covered Medicare visits for each type of service. The products represent the cost Medicare will recognize by type of service, subject to home health agency cost limits.

In 1986, Public Law 99-509 established the current methodology for determining home health care limits. These are set at 112 percent of the mean of the labor-related and nonlabor per unit costs for each type of service provided by freestanding home health agencies. The limits are then applied on an aggregate basis to all the visits made by the agency, with appropriate adjustments for the special costs of hospital-based agencies.

Beginning in 1990, the Medicare home health benefit became again one of the fastest growing parts of the Medicare program. In 1990, reimbursements for home health increased by 46 percent, and in 1991, they increased by 30 percent. As table 10 indicates, home health payments are projected to increase significantly through 1998.

TABLE 10.—TOTAL MEDICARE HOME HEALTH BENEFIT PAYMENTS ¹

[Dollars in millions]

Fiscal year	Reimbursements			Change from prior year (percent)	Visits per 1,000 enrollees ²	Average charge per visit ²
	Part A	Part B	Total			
1969	NA	NA	\$77		232	\$13
1970	NA	NA	89	15.6	222	14
1971	NA	NA	95	6.7	164	16
1972	NA	NA	97	2.1	168	17
1973	NA	NA	95	-2.1	189	18
1974	NA	NA	136	43.2	211	21
1975	NA	NA	207	52.2	271	24
1976	NA	NA	312	50.7	347	27
1977	NA	NA	406	30.1	419	29
1978	NA	NA	498	22.7	464	32
1979	NA	NA	592	18.9	515	34
1980	NA	NA	726	22.6	577	36
1981	NA	NA	914	25.9	713	40
1982	NA	NA	1,177	28.8	1,024	44
1983	NA	NA	1,538	30.7	1,227	47
1984	NA	NA	1,866	21.3	1,344	50
1985	\$2,118	53	2,171	16.3	1,329	55
1986	2,186	47	2,233	2.9	1,256	58
1987	2,280	48	2,328	4.3	1,153	61
1988	2,251	56	2,307	-0.9	1,144	64
1989	2,508	48	2,556	10.8	1,313	64
1990	3,646	82	3,728	45.9	1,889	64
1991	4,787	64	4,851	30.1	2,219	69
1992	7,077	75	7,152	47.4	3,717	59
1993	10,083	101	10,184	42.4	4,900	63
1994	13,597	118	13,715	34.7	6,023	66
1995	16,792	136	16,928	23.4	6,810	70
1996	19,476	155	19,631	16.0	7,291	75
1997	21,517	177	21,694	10.5	7,450	79
1998	23,321	202	23,523	8.4	7,516	84

¹ Based on fiscal year 1994 President's budget assumptions. HCFA revises historical estimates slightly with the added data available each year.

² Based on Part A alone.

NA=Not available.

Source: Health Care Financing Administration, Division of Budget.

HOSPICE CARE

Public Law 97-248 authorized Medicare part A coverage for hospice care services provided to individuals who are entitled to Medicare part A benefits and who are certified to be terminally ill. In 1986, the Congress in Public Law 99-272 made the hospice benefit a permanent part of the Medicare program effective April 7, 1986.

On December 16, 1983, the Health Care Financing Administration (HCFA), published regulations to implement the hospice provisions of Public Law 97-248. Among other things, the regulations establish requirements for eligibility, covered benefits, services, reimbursement procedures, and the conditions a hospice must meet to be approved for participation in the Medicare program.

Part A beneficiaries may elect to receive hospice care in lieu of most other Medicare benefits for up to two periods of 90 days each, a subsequent period of 30 days, and an additional extension period if elected.

The statute provides that payment to hospice providers be equal to the costs which are reasonable and related to the cost of providing hospice care, or which are based on such other tests of reasonableness as the Secretary may prescribe, subject to a "cap amount." The cap amount for a beneficiary for a year was established at \$6,500, adjusted annually by the medical component of the CPI. The cap for the period November 1, 1991 through October 31, 1992 is \$11,551.

HCFA has implemented a prospective payment methodology for hospice care. Under this methodology, hospices are paid one of four predetermined rates for each day a Medicare beneficiary is under the care of the hospice. The rates vary according to the level of care furnished to the beneficiary. Total reimbursement to a hospice for care furnished to the Medicare beneficiary will vary by the length of the patient's period in the hospice program as well as by the characteristics of the services (intensity and site) furnished to the beneficiary.

Four basic payment categories are used for reimbursing hospices. The payment rates are national rates which are adjusted by the Bureau of Labor Statistics wage index for an area. The published payment rates are:

(a) *Routine home care day*.—Routine home care day is a day on which an individual who has elected to receive hospice care is at home and is not receiving continuous home care. The routine home care rate is paid for every day a patient is at home and under the care of the hospice regardless of the volume or intensity of the services provided on any given day as long as less than 8 hours of care are provided. Currently, this rate is \$86.66.

(b) *Continuous home care day*.—A continuous home care day is a day on which an individual who has elected to receive hospice care receives hospice care consisting predominantly of nursing care on a continuous basis at home. Home health aide or homemaker services or both may also be provided on a continuous basis. Continuous home care is furnished only during brief periods of crisis and only as necessary to maintain the terminally ill patient at home. Home care must be provided for a period of at least 8 hours before it would be considered to fall within the category of continuous home care. Payment for continuous home care will vary depending on the number of hours of continuous services provided. Currently this rate is \$505.80 for 24 hours or \$21.08 per hour.

(c) *Inpatient respite care day*.—An inpatient respite care day is one on which the individual who has elected hospice care re-

ceives care in an approved facility on a short-term (not more than 5 days at a time) basis for the respite of his caretakers. Currently this rate is \$89.64.

(d) *General inpatient care day*.—A general inpatient care day is one on which an individual who has elected hospice care receives general inpatient care in an inpatient facility for pain control or acute or chronic symptom management which cannot be managed in other settings. Care may be provided in a hospital, skilled nursing facility or inpatient unit of a free-standing hospice. Currently this rate is \$385.52.

Public Law 101-239 required that the payment rates be increased by the hospital market basket percentage increase each fiscal year.

TABLE 11.—ESTIMATES OF HOSPICE PROGRAM DATA

	Admissions	Days per admission	Cost per hospice day	Cost per admission	Total cost (outlays in millions)
Fiscal year:					
1984	2,200	29	\$62	\$1,800	\$2
1985	11,000	33	66	2,200	15
1986	28,012	37	66	2,442	35
1987	68,721	41	74	3,034	63
1988	84,770	44	74	3,256	90
1989	89,008	48	74	3,552	211
1990	98,203	60	85	5,100	501
1991	112,097	61	93	5,686	637
1992	131,041	62	97	6,033	791
1993	151,054	63	101	6,382	964
1994	171,109	64	105	6,749	1,155
1995	190,153	65	110	7,142	1,358
1996	209,551	65	114	7,435	1,558
1997	229,061	65	119	7,733	1,771
1998	251,651	65	123	8,026	2,020

Source: 1984-1989: CBO estimates; 1990-1995: CBO baseline projections, January, 1990.

SKILLED NURSING FACILITY

Medicare's part A hospital insurance program covers 100 days of skilled nursing facility (SNF) care for persons who can demonstrate a need for daily skilled nursing care for a condition related to a prior hospitalization. The first 20 days of SNF care are paid in full by the program. Days 21 through 100 are subject to a copayment of \$84.50 a day in 1993. In 1991 Medicare covered an average of 33 days of care for those persons who qualified for the benefit.

In general, SNFs are reimbursed on the basis of reasonable costs subject to certain limits. For SNFs, limits are applied to the per diem routine service costs (nursing, room and board, administrative, and other overhead) of a facility. Capital-related and ancillary costs, such as physical therapy and drugs, are excluded from the cost limits. Separate limits are established for SNFs on the basis of

whether they are freestanding or hospital-based facilities and whether they are located in urban or rural areas. Freestanding SNF cost limits are set at 112 percent of the average per diem labor-related and nonlabor costs. Hospital-based SNF cost limits are set at the limit for freestanding SNFs, plus 50 percent of the difference between the freestanding limit and 112 percent of the average per diem routine service costs of hospital-based SNFs.

Public Law 99-272 established a prospective payment rate system for certain SNFs that elect such payment for cost reporting periods beginning on or after October 1, 1986. SNFs providing less than 1,500 days of care per year to Medicare patients in the preceding year would have the option of being paid a prospective payment rate set at 105 percent of the regional mean for all SNFs in the region. The rate is calculated separately for urban and rural areas and the prospective per diem rate also reflects wage differences between urban and rural areas within each region. These rates cannot exceed the per diem cost limit that would otherwise be applicable to that facility and cannot exceed its cost limit adjusted for capital costs.

Several important changes occurred in the SNF program during 1988 and 1989. First, in April 1988, HCFA issued a new manual to the carriers that was designed to clarify the SNF eligibility requirements. Increases in monthly SNF outlays and anecdotal information strongly suggested that the manual clarifications increased eligibility. Before this manual was issued, monthly outlays for Medicare SNF's were approximately \$60 million per month. By the end of 1988, they had risen to almost \$100 million per month.

Second, in June 1988 the Medicare Catastrophic Coverage Act of 1988 was enacted. The Medicare catastrophic legislation (1) removed the requirement that a Medicare beneficiary had to be in the hospital for at least 3 days prior to entering a SNF, (2) instituted a daily coinsurance payment in 1989 of \$25.50 for the first 8 days (formerly no copayments were required for the first 20 days), (3) eliminated the coinsurance a beneficiary would have to pay after 8 days (formerly copayments of one-eighth of the hospital deductible of \$70 in 1989 were required for days 21-100), and (4) changed the number of days that a person could receive the benefit from 100 days per spell of illness to 150 days per year. These changes were effective January 1, 1989. Monthly SNF spending rose rapidly from \$97 million in January 1989 to \$280 million in November 1989. Congress subsequently repealed all the legislative changes made in the SNF benefit when it repealed the Medicare Catastrophic Coverage Act. In 1993, the copayment required for days 21-100 is \$84.50.

TABLE 12.—SKILLED NURSING FACILITY DATA

Fiscal year	Number of SNF facilities	Total covered days of care (thousands)	Total interim reimbursement (thousands)	Interim reimbursement per day
1977	4,461	9,757.7	314,148	32
1978	4,982	9,231.1	317,472	34
1979	5,055	8,642.0	329,388	38
1980	5,155	8,701.0	358,508	41
1981	5,295	8,678.2	393,939	45
1982	5,510	8,696.2	425,251	49
1983	5,760	9,277.4	465,341	50
1984	6,183	9,546.9	489,722	51
1985	6,725	9,114.1	509,714	56
1986	7,065	8,175.6	515,444	63
1987	7,148	7,501.8	560,521	75
1988	7,379	11,148.6	856,944	77
1989	8,201	30,153.5	3,045,001	101
1990	8,937	23,941.8	1,966,608	82
1991 ¹	9,674	22,098.4	2,238,432	101

¹ Data are considered preliminary.

Source: Data derived from Medicare Decision Support System (MSS), Current Utilization Series Table 8, 10/30/92 Update.

Table 12 shows the impact of the 1989 expansions: the number of participating facilities, covered days of care, and total reimbursement all increased in 1989. While covered days of care and reimbursements have declined since the repeal of the expansions, they have not returned to their pre-1989 levels. A report of the Office of the Inspector General, DHHS, points to the continued impact of the revised coverage guidelines; SNFs reluctance to abandon their decisions to participate or expand their certified beds after having invested resources to do so; and high demand for skilled nursing home care.

DURABLE MEDICAL EQUIPMENT

Current Medicare law does not provide an inclusive definition of durable medical equipment (DME). Section 1861(n) of the Social Security Act specifies that DME includes “* * * iron lungs, oxygen tents, hospital beds, wheelchairs (including power-operated vehicles) * * * used in a patient’s home, including an institution used as his home * * *” DME also includes “medical supplies (including catheters, catheter supplies, ostomy bags, and supplies related to ostomy care, but excluding drugs and biologicals).”¹ In addition to items specified in the law, a wide variety of DME is covered under Medicare part B.

¹ Section 1861(m)(5) of the Social Security Act.

CURRENT REIMBURSEMENT FOR DURABLE MEDICAL EQUIPMENT

Medicare pays for DME on the basis of a fee schedule enacted in the Omnibus Budget Reconciliation Act of 1987. Prior to OBRA 1987, reimbursement for DME was made on the basis of reasonable costs to hospital outpatient departments and other providers, such as skilled nursing facilities, and reasonable charges to other part B suppliers. The fee schedule became effective January 1, 1989.

Under the fee schedule, reimbursement is the lesser of 80 percent of the actual charge for the item or the fee schedule amount. Within the fee schedule, there are five categories of DME. Each category has separate reimbursement principles, although the principles for some categories are similar. The five categories are as follows: (1) inexpensive or other routinely purchased durable medical equipment, which is defined as equipment costing less than \$150 or which is purchased at least 75 percent of the time; (2) items requiring frequent and substantial servicing; (3) customized items, which is defined as equipment constructed or modified substantially to meet the needs of an individual patient; (4) other items of durable medical equipment (frequently referred to as the "capped rental" category); and (5) oxygen and oxygen equipment.

In addition to these five categories, prosthetics and orthotics were also included in the DME fee schedule prior to the enactment of the Omnibus Budget Reconciliation Act of 1990. Section 1861(s)(9) of the Social Security Act defines prosthetics and orthotics as "leg, arm, back and neck braces, and artificial legs, arms and eyes." As with DME, this definition is not inclusive.

OBRA 1990 established reimbursement principles for prosthetics and orthotics under a separate section of law. Although a new section of law was created for prosthetics and orthotics, the reimbursement principles established remained identical to those under the DME fee schedule, except that prosthetics and orthotics were exempted from the DME reimbursement changes made in OBRA 1990. (The following discussion of DME reimbursement principles includes prosthetics and orthotics.)

Table 13 shows total Medicare allowed payment amounts for DME in calendar year 1991.

TABLE 13.—ALLOWED AMOUNTS FOR SELECTED DURABLE MEDICAL EQUIPMENT (DME)
CALENDAR YEAR 1991

Category	Allowed amounts [millions]
Capped rental ¹	\$461
Customized items ²	7
Oxygen ³	739
Prosthetics/orthotics ⁴	553
Inexpensive/routinely purchased ⁵	137
Items requiring frequent maintenance ⁶	144
Other ⁷	349
Total	2,390

¹ Items of DME on a monthly rental basis not to exceed a period of continuous use of 15 months.

² Items unsuitable for grouping together for profiling due to unique nature (custom fabrication, etc.). Payment based on individual adjudication. Amount is incomplete because it only represents HCPCS E1220. Other items are not coded in HCPCS.

³ Oxygen and oxygen equipment paid based on a monthly rate per beneficiary. Payment not made for purchased equipment except where installment payments continue.

⁴ These items include other prosthetic and orthotic devices (except for items included in the categories "Customized Items" and "Items Requiring Frequent Maintenance," transcutaneous electrical nerve stimulators, parenteral/enteral nutritional supplies and equipment, and intraocular lenses). Devices in this category paid on lump sum purchase basis.

⁵ Inexpensive defined as equipment for which the purchase price does not exceed \$150. Routinely Purchased defined as equipment that is acquired 75 percent of the time by purchase.

⁶ Paid on a rental basis until medical necessity ends.

⁷ This category includes medical and surgical supplies, additional ostomy supplies, enteral formulae and enteral medical supplies, orthotic devices, and vision services which were reported using procedure codes (e.g., temporary codes and local codes) not included on the list of codes for categories 1-6 (above) provided by the Health Care Financing Administration (HCFA), Bureau of Policy Development.

Source: Health Care Financing Administration (HCFA), Bureau of Data Management and Strategy. Data from the part B Medicare Annual Data System. Codes for the categories above provided by HCFA, Bureau of Policy Development.

CHART 1. MEDICARE REIMBURSEMENT FOR DURABLE MEDICAL EQUIPMENT

Examples of items.....	Inexpensive or routinely purchased DME	Items requiring frequent and substantial servicing	Customized items	Other items of DME (capped rental)	Prosthetics and orthotics	Oxygen and oxygen equipment
Examples of items.....	Commode chairs, electric heat pads, IV poles, bed rails, vaporizers, blood glucose monitors, pacemaker monitors, seat lift chairs.	Ventilators, internal positive pressure breathing (IPPB) machines, suction nebulizers, pumps.	Customized wheelchairs adapted specifically for an individual.	Hospital beds, infusion pumps, walkers, wheelchairs (including power-driven chairs.	Artificial limbs, ostomy supplies.	Liquid and gaseous and various types of oxygen equipment.
Fee schedule basis.....	Average charge for purchase or rental.	Average reasonable charge.	Determined by the carrier on an individual basis.	Average of purchase prices on assigned claims, reduced by the percentage by which average charges is lower than average purchase prices.	Average reasonable charge for purchase.	Average reasonable charge for purchase.
National floors and ceilings.	Floor = 85% of weighted average of local payment amounts; ceiling = 100% of same. Effective: 1991.	Floor = 85% of weighted average of local payment amounts; ceiling = 100% of same. Effective: 1991.	No.....	Floor = 85% of weighted average of local payment amounts; ceiling = 100% of same. Effective: 1991.	Floor = 85% of average of national purchase prices; ceiling = 125% of same. Effective: 1992. Subsequent year: limits are 90% and 120%.	Floor = 85% of local monthly payment rates; ceiling = 100% of same. Effective 1991.
1993 update.....	CPI-U	CPI-U	Not applicable	CPI-U	CPI-U	CPI-U

CHART 1. MEDICARE REIMBURSEMENT FOR DURABLE MEDICAL EQUIPMENT—Continued

	Inexpensive or routinely purchased DME	Items requiring frequent and substantial servicing	Customized items	Other items of DME (capped rental)	Prosthetics and orthotics	Oxygen and oxygen equipment
Other provisions		Reasonable lifetime		Reasonable lifetime; limit on rental payments = 120% of purchase price.	.....
Base period	July 1, 1986 to June 30, 1987, updated by the CPI-U to Dec. 1987.	July 1, 1986 to June 30, 1987, updated by the CPI-U to Dec. 1987.	Not applicable	Base period for purchase prices—July 1, 1986 to Dec. 30, 1986, updated by the CPI-U to Dec. 1987. Base period for reasonable charges—Apr. 1, 1988—Dec. 31, 1988.	July 1, 1986 to June 30, 1987.	Jan. 1, 1986 to Dec. 30, 1986, reduced by 5%, and updated by the CPI-U to Dec. 1987.
Rent or purchase	Rental or purchase	Rental only	Purchase only	Rental with option to purchase in first month for power-driven chairs; for other items, option to purchase is offered in the 10th continuous rental month.	Purchase only	Not applicable—monthly payment amount made.

Regional or national limits.	Phased-in national limits, beginning in 1991 and fully implemented in 1993.	Phased-in national limits, beginning in 1991 and fully implemented in 1993.	Not applicable	Phased-in national limits, beginning in 1991 and fully implemented in 1993.	Phased-in regional limits beginning in 1992 and fully implemented in 1994.	Phased-in national limits beginning in 1991 and fully implemented in 1993.
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Medicare law specifies detailed reimbursement principles for DME.² Chart 1 gives examples of each category of equipment, shows the key components of the fee schedule, and describes how these components affect each category of equipment. The following discussion provides more explanation about these components.

Fee schedule basis

The basis for determining the fee schedule is established in law for each type of equipment. For items requiring frequent and substantial servicing, prosthetics and orthotics, and oxygen and oxygen equipment, the average Medicare *reasonable* charge is the basis from which fee schedule payments are calculated. Under reasonable charge reimbursement, payment is set at the lowest of the actual charge, the customary charge, the prevailing charge in the locality, or the inflation indexed charge (IIC) for that item.

Other reimbursement mechanisms are specified for categories of equipment not subject to the reasonable charge criteria. The basis of payment for items requiring frequent and substantial servicing is the *average* charge. For customized items, carriers are permitted to determine the appropriate payment amount without regard to average or reasonable charges.

The fee schedule basis for "capped rental" equipment is more complicated than for other categories. Originally, the basis for determining fee schedule payments for capped rental equipment was the average of submitted purchase prices on assigned claims during the base period.³ OBRA 1990 altered this provision by setting the basis equal to the average of the purchase prices submitted for assigned claims submitted during the base time period, increased by the update factor, minus the percentage by which the average of the reasonable charges for submitted claims is lower than the average of purchase prices submitted for items during the last 9 months of 1988.

Implementation of this provision was originally slated for January 1, 1991, but was delayed until June 1991 because of questions about the validity of claims data. Payment limits were implemented retroactively to May 1, 1991. This provision was included in OBRA 1990 because of Congressional concerns that the fee schedule basis for capped rental items was too high and thus resulted in excessive Medicare payments for these items.

Base time period

Current law specifies the time period used to calculate the basis of the fee schedule for each category of equipment. The most common base period is from July 1, 1986 to June 30, 1987, updated by the Consumer Price Index for Urban consumers (CPI-U) to December 1987.

² The DME fee schedule is contained in section 1834(a) of the Social Security Act; reimbursement principles for prosthetics and orthotics are specified in section 1834(h).

³ In the case of assigned claims, the supplier agrees to accept 80 percent of the Medicare fee schedule payment as payment in full. The beneficiary is liable for 20 percent coinsurance, but not for any amount by which the supplier's charge exceeds the fee schedule amount.

Rental or purchase

Some categories of DME may only be rented, some may only be purchased, and some may be either rented or purchased. Inexpensive or routinely purchased DME may be rented or purchased. Items requiring frequent and substantial servicing must be rented because they need regular maintenance to function properly and avoid risk to beneficiaries' health. Customized items may only be purchased because they are specifically fitted for an individual and cannot be used by anyone else. Since oxygen is a consumable item, it cannot be rented. Medicare does not reimburse for purchase of oxygen equipment; rental for equipment is included in the monthly payment for oxygen.

Other items of DME are rented with an option to purchase at different times, depending on the equipment. For power-driven wheelchairs, beneficiaries are given the option to purchase in the first month of rental. If beneficiaries exercise the option to purchase power-driven wheelchairs, payment for purchase is made on a lump-sum basis. For other items in this category, beneficiaries are given the option to purchase in the tenth month of continuous rental. If beneficiaries opt to purchase, title is transferred to them after the thirteenth month of continuous rental.⁴ For all items in this category of DME, reimbursement for rental is limited to 15 continuous months.

Regional or national limits on payment

Beginning in 1993, most categories of DME are subject to national limits on payments. The national limits replace regional limits enacted in OBRA 1987.

Customized items and prosthetics and orthotics are not subject to these limits. Customized items are not subject to any payment limits, while prosthetics and orthotics are subject to regional payment limits, beginning in 1992, and fully implemented in 1994.

Payment floors and ceilings

The national limits on payments contain upper and lower limits (referred to as ceilings and floors) on payments. The ceiling is equal to 100 percent of the weighted average of local payment amounts and the floor is equal to 85 percent of the weighted average of local payment amounts. These limits took effect in 1991.

The floors and ceilings applied to the regional payment limits for prosthetics and orthotics vary somewhat from those used for national payment limits. The limits did not take effect until 1992. In 1992, the floor for prosthetics and orthotics was the same—85 percent of the weighted average of the local payment amount, but the ceiling is higher—125 percent of the weighted average. In addition, the limits differ in 1993 and subsequent years, when they are set at 90 and 120 percent of the weighted average of local payment amounts.

⁴ The same cycle of payments for maintenance and servicing applies to both rented and purchased equipment in this category.

Update to the fee schedule

The 1993 fee schedule update for most categories of DME is the CPI-U or 3.1 percent. The update is applied to fee schedule payments set during the base period, rather than to more current charge data.

The 1993 payment update for prosthetics and orthotics is the CPI-U or 3.1 percent. Prosthetics and orthotics did not receive an update in 1991, and one piece of prosthetic and orthotic equipment, a transcutaneous electrical nerve stimulator (TENS), was subject to a 15-percent reduction in fee schedule payments from April 1, 1990, through December 30, 1990. TENS devices were subjected to an additional 15 percent reduction in 1991.

Other provisions

Useful lifetime for rental items.—As enacted in OBRA 1987, payment for categories of equipment that could only be rented was made on a monthly basis. In the case of items requiring frequent and substantial servicing, monthly rental payments continued as long as the equipment was needed. In the case of capped rental items, monthly payments were made for 15 months, after which one payment was made every subsequent 6 months for maintenance and servicing of the item. In both cases, no provision was made for replacement of the item.

OBRA 1990 permitted the Secretary to establish a useful lifetime for these types of equipment, and to establish a new cycle of monthly payments for capped rental items. A useful lifetime of 5 years was established, unless the Secretary determines that 5 years is not appropriate for an individual item. In that case, the Secretary is to establish an alternative reasonable lifetime. When the reasonable lifetime has been reached, or the carrier determines that an item is lost or irreparably damaged, the item is replaced.

Limitation on payment amounts for capped rental items.—Prior to OBRA 1990, monthly payments for capped rental items were made for a 15-month period, with total payments for an item limited to 150 percent of the purchase price. Each monthly payment was equal to 10 percent of the purchase price. OBRA 1990 limited monthly rental payments for these items to 120 percent of the purchase price, with monthly payments equal to 10 percent of the purchase price for the first 3 months, and 7.5 percent of the purchase price for the next 12 months.

ADMINISTRATION OF THE FEE SCHEDULE

Consolidation of administration

On June 18, 1992, the Health Care Financing Administration (HCFA) published a final rule regarding DME claims payments. The rule establishes four regional carriers to process all claims for DME and prosthetics and orthotics. HCFA argues that, as a result of this consolidation, greater efficiency in claims processing will be achieved, and variance in coverage policy and utilization parameters will be greatly reduced.

In addition, the rule also requires that the responsibility for processing claims for beneficiaries residing within each regional area would be allocated to the regional carrier for that area. This

change will eliminate the ability of suppliers to engage in "carrier shopping," that is, filing claims in those carrier areas that have higher payment rates.

Consolidation of claims processing for DME and prosthetics and orthotics will be phased in beginning October 1, 1993. The process will be on a state-by-state basis with the larger States being incorporated into the system during the final stages.

The rule also proposes minimum standards that suppliers must meet before obtaining a Medicare billing number. A supplier must receive and fill orders from its own inventory or inventory in other companies with which it has contracted to fill such orders. In addition, a supplier must be responsible for delivering Medicare covered items to beneficiaries, honoring any warranties, answering any questions or complaints the beneficiaries might have, maintaining and repairing rental items and accepting returns of substandard or unsuitable items from beneficiaries.

Overused items

OBRA 1990 required the Secretary to develop a list of DME items frequently subject to unnecessary utilization; the list must include seat-lift mechanisms; transcutaneous electrical nerve stimulators (TENS); and motorized scooters. Carriers are directed to determine, in advance, whether payment will be made for items on the Secretary's list. Thus, DME suppliers must obtain carriers' approval before providing items on the list to Medicare beneficiaries.

Certificates of medical necessity

All DME must be prescribed by a physician in order to be reimbursed by Medicare. Instead of a physician's prescription, carriers may require completion of a certificate of medical necessity (CMN) to document that an item is reasonable and medically necessary. OBRA 1990 prohibited DME suppliers from distributing completed or partially completed CMNs and established penalties for suppliers who knowingly and willfully distribute forms in violation of the prohibition.

The purpose of this provision was to prohibit DME suppliers from directly marketing DME items to Medicare beneficiaries by providing them with completed CMNs for them to submit to their physicians. Requiring physicians to complete CMNs will also encourage them to take a more active role in considering their patients' needs for DME, while simultaneously reducing DME suppliers' ability to influence DME acquisition.

This provision was to be implemented January 1, 1991, but was not implemented until December 1991 because of administrative difficulties.

Inherent reasonableness

The Secretary is permitted to increase or decrease Medicare payments in cases where the payment amount is " * * * grossly excessive or grossly deficient and not inherently reasonable." The Secretary's authority to make these payment adjustments is generally referred to as inherent reasonableness authority.

In order to make a payment adjustment, the Secretary must demonstrate that the payment meets several criteria of inherent

reasonableness specified by law. In addition, the Secretary must publish a notice in the Federal Register outlining his proposal to reduce or increase payment amounts, the proposed methodology for adjusting the payment amount, and the potential impact of the payment adjustment. The Secretary is also required to provide a 60-day public comment period and to publish a final determination in the Federal Register. The final determination must include an explanation of the factors and data the Secretary took into consideration in making the determination.

According to HCFA, the Secretary rarely uses inherent reasonableness authority because the requirements are too stringent and the notice requirements too burdensome to permit easy imposition of inherent reasonableness adjustments. Moreover, the Secretary was prohibited, by law, from making inherent reasonableness adjustments to the DME fee schedule prior to January 1, 1991.

MEDICARE PAYMENTS FOR SERVICES IN HOSPITAL OUTPATIENT DEPARTMENTS

Medicare outpatient hospital services are reimbursed under Medicare part B. Services provided in outpatient hospital settings and included in expenditure data for this service setting are: emergency room services, clinic, laboratory, radiology, pharmacy, physical therapy, ambulance, operating room services, end stage renal disease services, durable medical equipment, and other services such as computer axial tomography and blood. Services rendered by physicians in outpatient hospital settings are not included in these expenditure data.

Prior to 1983, hospital outpatient services, excluding physicians' services, were paid for on a reasonable cost basis. Some services, such as emergency services, are still reimbursed on a reasonable cost basis. However, Congress has enacted a number of provisions that have altered the ways hospital outpatient departments are paid for their services and placed limits on others. For example, outpatient dialysis services are paid on the basis of a fixed composite rate; clinical laboratory services are paid on the basis of a fee schedule; x-ray services are subject to a limit on payments; and ambulatory surgical facility fees for surgeries performed in hospital outpatient departments are based on a weighted average of the hospital's costs and the prevailing fee that would be paid to a free-standing ambulatory surgical facility in the area.

Payments for services delivered in outpatient hospitals were \$8.2 billion in calendar year 1990. Payments to outpatient hospitals constituted approximately 20 percent of all Medicare part B payments in 1990 and about 8 percent of total Medicare payments (parts A and B). Table 14 provides information on the number of part B enrollees, covered charges, aggregate reimbursements and reimbursements per enrollee for hospital outpatient services from 1974 to 1990. Table 15 shows the percent distribution of Medicare hospital outpatient charges, by type of service for 1990.

TABLE 14.—MEDICARE HOSPITAL OUTPATIENT CHARGES AND REIMBURSEMENT BY TYPE OF ENROLLMENT AND YEAR SERVICE INCURRED: SELECTED CALENDAR YEARS 1974-90

Type of enrollment and year service	Number of SMI ¹ enrollees in thousands	Covered charges in thousands	Reimbursements		
			Amount in thousands	Per enrollee	Percent of charges
All beneficiaries:					
1974.....	23,167	\$535,296	\$323,383	\$14	60.4
1976.....	24,614	974,708	630,323	26	64.7
1978.....	26,074	1,384,067	923,658	35	66.7
1980.....	27,400	2,076,396	1,441,986	52	69.4
1982.....	28,412	3,164,530	2,203,260	78	69.6
1984.....	29,415	5,129,210	3,387,146	115	66.0
1986.....	30,590	8,115,976	4,881,605	160	60.1
1987.....	31,170	9,623,763	5,600,094	180	58.2
1988.....	31,617	11,833,919	6,371,704	201	53.8
1989.....	32,099	14,195,252	7,160,586	223	50.4
1990.....	32,636	18,346,471	8,171,088	250	44.5
Average annual rate of growth					
1974-89.....	2.2	24.4	22.9	20.3	-1.9
1974-84.....	2.4	25.4	26.5	23.4	0.9
1984-90.....	1.5	18.5	13.3	11.7	-4.4
Aged:					
1974.....	21,422	\$394,680	\$220,742	\$10	55.9
1976.....	22,446	704,569	432,971	19	61.5
1978.....	23,531	1,005,467	648,249	28	64.5
1980.....	24,680	1,517,183	1,030,896	42	69.9
1982.....	25,707	2,402,462	1,645,064	64	68.5
1984.....	26,764	4,122,859	2,679,571	100	65.0
1986.....	27,863	6,529,273	3,809,992	137	58.4
1987.....	28,382	7,859,038	4,436,787	156	56.5
1988.....	28,780	9,790,273	5,098,546	177	52.1
1989.....	29,216	11,855,127	5,767,589	197	48.6
1990.....	29,691	15,384,510	6,563,454	221	42.7
Average annual rate of growth					
1974-89.....	2.1	25.5	24.3	22.0	-0.9
1974-84.....	2.3	26.4	28.4	25.9	1.5
1984-90.....	1.7	24.5	16.1	14.1	-6.8
Disabled:					
1974.....	1,745	\$140,617	\$102,641	57	70.8
1976.....	2,168	270,139	197,352	91	73.1
1978.....	2,543	378,600	275,409	108	72.7
1980.....	2,719	559,213	411,090	152	73.5
1982.....	2,705	762,068	558,195	206	73.2
1984.....	2,651	1,006,351	707,575	267	70.3
1986.....	2,727	1,586,703	1,071,613	393	67.5
1987.....	2,788	1,764,726	1,163,307	417	65.9
1988.....	2,837	2,043,646	1,273,158	449	62.3
1989.....	2,883	2,340,124	1,392,897	483	59.5

TABLE 14.—MEDICARE HOSPITAL OUTPATIENT CHARGES AND REIMBURSEMENT BY TYPE OF ENROLLMENT AND YEAR SERVICE INCURRED: SELECTED CALENDAR YEARS 1974–90—Continued

Type of enrollment and year service	Number of SMI ¹ enrollees in thousands	Covered charges in thousands	Reimbursements		
			Amount in thousands	Per enrollee	Percent of charges
1990.....	2,945	2,961,961	1,607,634	546	54.0
Average annual rate of growth					
1974–89.....	3.4	20.6	19.0	15.3	–1.2
1974–84.....	4.3	21.8	21.3	16.7	–0.1
1984–90.....	1.8	19.7	14.7	12.7	–4.3

¹ 1974 is the first full year of coverage for disabled beneficiaries under Medicare.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Decision Support System; Data developed by the Office of Research and Demonstrations.

From 1984 to 1990, hospital outpatient reimbursements grew 13.3 percent a year.

TABLE 15.—PERCENT DISTRIBUTION OF HOSPITAL OUTPATIENT CHARGES UNDER MEDICARE, BY TYPE OF SERVICE, 1990

	Percent of charges
Radiology.....	22.8
End stage renal disease.....	11.8
Laboratory.....	11.4
Operating room.....	9.7
Pharmacy.....	6.0
Emergency room.....	3.6
Clinic.....	2.2
Physical therapy.....	3.3
Ambulance.....	1.0
All other.....	28.2

Source: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System (unpublished).

Recent legislative changes

Capital.—OBRA 1989 reduced payments for capital costs for outpatient services paid on a reasonable cost basis or a blend of reasonable costs and charges by 15 percent for portions of cost-reporting periods *beginning* in fiscal year 1990. This reduction also applied to capital related to services reimbursed on a blended amount; these services include radiology, diagnostic procedures and outpatient surgery. However, in the case of blends or limits based on blends, the reduction applied only to the cost portion of the

blended amount. Outpatient capital costs of sole community hospitals were exempt from this reduction.

OBRA 1990 reduced reimbursement for capital costs for outpatient hospital services and the cost portion of outpatient hospital services paid on the basis of a blended amount for payments attributable to portions of cost-reporting periods *occurring during* fiscal year 1991 by 15 percent. These payments will be reduced by 10 percent for portions of cost-reporting periods *occurring during* fiscal years 1992, 1993, 1994, and 1995. Sole community hospitals and rural primary care hospitals are exempt from these reductions.

Services paid on a cost-related basis.—OBRA 1990 also reduced payment for services paid on a cost-related basis, other than capital costs, by 5.8 percent of the recognized costs for payments attributable to cost-reporting periods occurring during fiscal years 1991, 1992, 1993, 1994, and 1995. The reduction is also applied to cost portions of blended payment limits for ambulatory surgery and radiology services. Sole community hospitals and rural primary care hospitals are exempt from the reduction.

Prospective payment proposal.—OBRA 1990 also directed the Secretary to develop a proposal to replace the current payment system for hospital outpatient services with a prospective payment system. The Secretary is to consider the following factors in developing the proposal: (1) the need to provide for appropriate limits on increases in Medicare expenditures; (2) the need to adjust prospectively determined rates to account for changes in a hospital's outpatient case mix; (3) providing hospitals with incentives to control the costs of providing outpatient services; (4) the feasibility and appropriateness of including payment for outpatient services not currently paid on a cost-related basis under Medicare (including clinical diagnostic laboratory tests and dialysis services) in the system; (5) the need to increase payments to hospitals that treat a disproportionate share of low-income patients; teaching hospitals; and hospitals located in geographic areas with high wages and wage-related costs; (6) the feasibility and appropriateness of bundling services into larger units, such as episodes or visits, in establishing the basic unit for making payments under the system; and (7) the feasibility and appropriateness of varying payments on the basis of whether services are provided in a freestanding or hospital-based facility.

The law also required the Administrator of Health Care Financing Administration to submit research findings regarding prospective payments for hospital outpatient services to specified committees of Congress by January 1, 1991. The Secretary was directed to submit his proposal to Congress by September 1, 1991. As of January 1993, that report had not been submitted to Congress. The Prospective Payment Assessment Commission (ProPAC) was to submit its analysis and comments on the proposal by March 1, 1992. ProPAC recommended implementation of a prospective payment system for all providers of outpatient services, including hospitals, physicians' office-based services, and freestanding ambulatory surgical centers. The Commission also recommended adjusting the payment rate to reflect justifiable cost differences such as wages and case mix.

Eye and eye and ear specialty hospitals.—OBRA 1990 also changed the reimbursement blend for ambulatory surgery services provided in eye, and eye and ear specialty hospitals meeting specified conditions. Prior to OBRA 1990, payment for these services was based on a blend that consists of 75 percent of the hospital's costs and 25 percent of the applicable freestanding ambulatory surgical center rate. However, the blend was scheduled to change to 50/50 for cost-reporting periods beginning after fiscal year 1990. OBRA 1990 extended use of the 75/25 blend to services provided in cost-reporting years beginning before January 1, 1995.

UTILIZATION AND QUALITY CONTROL PEER REVIEW PROGRAM

The Medicare utilization and quality control peer review organization program was established by Congress under the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA, P.L. 97-35). Building on the former professional standards review organizations, the new peer review organizations (PROs) were charged by the 1982 law with reviewing services furnished to Medicare beneficiaries to determine if the services met professionally recognized standards of care and were medically necessary and delivered in the most appropriate setting. Major changes were made to the PRO program by the Social Security Act Amendments of 1983 (P.L. 98-21) and subsequent budget reconciliation acts. Most PRO review is focused on inpatient hospital care. However, there is limited PRO review of ambulatory surgery, postacute care, and services received from Medicare HMOs.

There are currently 53 PRO areas, incorporating the 50 States, Puerto Rico, and the territories. Organizations eligible to become PROs include physician-sponsored and physician-access organizations. In limited circumstances, Medicare fiscal intermediaries may also be eligible. Physician-sponsored organizations are composed of a substantial number of licensed physicians practicing in the PRO review area (e.g., a medical society); physician access organizations are those which have available to them sufficient numbers of licensed physicians so that adequate review of medical services can be assured. Such organizations obtain PRO contracts from the Secretary of HHS, through a competitive proposal process. Each organization's proposal is evaluated by HCFA for technical merit using specific criteria that are quantitatively valued. Priority is given to physician-sponsored organizations in the evaluation process. By the end of 1993, all 53 PROs should be operating under the fourth round of contracts (also referred to as the "fourth scope of work").

In general, each PRO has a medical director and a staff of nurse reviewers (usually registered nurses), data technicians, and other support staff. In addition, each PRO has a board of directors, comprised of physicians and, generally, representatives from the State medical society, hospital association, and State medical specialty societies. OBRA 1986 (P.L. 99-509) requires each board to have a consumer representative. Because the board is usually consulted before a case is referred by the PRO to the HHS inspector general for sanction, it assumes a major role in the PRO review process. Each PRO also has physician advisors who are consulted on cases in which there is a question regarding the nurse reviewer's refer-

ral. Only physician advisors can make initial determinations about services furnished or proposed to be furnished by another physician.

PROs are paid by Medicare on a cost basis for their review work. Spending for the PROs in fiscal year 1991 totaled \$277 million; in 1992, spending totaled \$188 million. (Spending varies considerably from year to year depending on where the PROs are in their contract cycles. HCFA projections for fiscal year 1993 exceed \$400 million.) Funds for the PRO program are apportioned each year from the Medicare HI and SMI trust funds in an amount that is supposed to be sufficient to finance PRO program requirements. This is the same manner as transfers are made for payment of Medicare services provided directly to beneficiaries. Congress and HHS, in consultation with the Office of Management and Budget (OMB), determine the amount to be apportioned and the way in which funds are to be allocated among the different PRO functions. HCFA is bound by law to follow the apportionments in the running of the PRO program; as such, the apportionments determine contract specifications and serve as a device to control spending.

The PRO review process combines both utilization and quality review. In conducting utilization review, the PRO checks that the services provided to a Medicare patient were necessary, reasonable, and appropriate to the setting in which they are provided. Although some utilization review is done on a prospective basis, the bulk of the reviews are done retrospectively, i.e., after the hospitalization has occurred. When a PRO determines that the services provided were unnecessary or inappropriate (or both), it issues a payment denial notice. The provider(s), physician(s), and the patient are given an opportunity to request reconsideration of the determination.

In general, the PRO checks for indications of poor quality of care as it is conducting utilization review. If a PRO reviewer detects a possible problem, then further inquiry is made into the case. If it is determined that the care was of poor quality, the PRO must take steps to correct the problem. Specific sanctions are required if the PRO determines that the care was grossly substandard or if the PRO has found that the provider or the physician has a pattern of substandard care. In addition, under section 9403 of COBRA (P.L. 99-272), as amended by P.L. 101-239, authority exists for the PROs to deny payments for substandard quality of care but this provision has not yet been implemented.

Each of the contracts between HHS and the PROs must contain certain similar elements outlined in a document known as the Scope of Work. Under the third and previous scopes of work, PRO review was centered on case-by-case examinations of individual medical records, selected primarily on a sample basis, basically using local clinical criteria. This approach to medical review has been criticized by the Institute of Medicine and others as being costly, confrontational, and ineffective. The fourth scope of work will incorporate a new review strategy called the Health Care Quality Improvement Initiative. PROs will be required to use explicit, more nationally uniform criteria to examine patterns of care and outcomes using detailed clinical information on providers and patients. Instead of focusing on unusual deficiencies in care, the

PROs will be instructed to focus on persistent differences between actual indications of care and outcomes from those patterns of care and outcomes considered achievable. HCFA believes that this new approach will encourage a continual improvement of medical practice in a way that will be viewed by physicians and providers as educational and not adversarial.

CBO BASELINE MEDICARE PROJECTIONS

The supplementary medical insurance (SMI) baseline is constructed following the Medicare volume performance standard (the standard) guidelines established in OBRA 1989 and amended in OBRA 1990. The standard is a prospectively set target for growth in physicians' services. Actual growth is then compared to the standard and physicians' fees are adjusted to reflect the difference between the standard and actual growth. For example, the 1990 standard was set at 9.1 percent for all physicians' services. The actual growth in 1990 expenditures for physicians' services was 10.0 percent. Therefore, the 1992 Medicare Economic Index (MEI) was reduced by the difference (0.9 percent) subject to a maximum reduction of 2 percentage points.

For years after 1991, a default process was established to set a standard in the absence of congressional action. A standard is calculated for all physicians' services and for surgical and nonsurgical services separately. Surgical services are defined as surgical services performed by surgical specialists. Nonsurgical services are all other physicians' services including independent laboratory services. If the default becomes the standard, then the update for each category of physicians' services would be adjusted by the difference between growth in expenditures and the standard for each category.

On November 25, 1991, HHS announced that the 1992 standard is 6.5 percent for surgical services, 11.2 percent for nonsurgical services, and 10.0 percent for all physicians' services.

The default standard is the product of (1) the increase in fees for physician services, (2) the increase in average enrollment (or non-HMO enrollees), (3) the average annual increase in the volume and intensity of services for the past 5 years, (4) the percentage increase or decrease caused by legislation or regulation, and (5) 1 minus the standard factor stated in the law. The standard factor is 1.5 percentage points in 1992 and is 2 percentage points in 1993 and thereafter.

TABLE 16.—CBO BASELINE PROJECTIONS FOR MEDICARE PROGRAM COMPONENTS

(Outlays by fiscal year, in billions of dollars)

	1992	1993	1994	1995	1996	1997	1998
I. Part A: Hospital Insurance (HI)							
A. Total HI outlays	82.0	91.2	102.4	113.8	125.2	136.8	148.6
Hospitals	68.9	74.4	81.6	89.8	98.4	107.5	116.9
PPS hospitals	59.5	63.6	69.3	75.6	82.0	88.5	94.9
PPS-exempt hospitals	9.4	10.7	12.3	14.1	16.4	19.0	22.0
Hospice	0.8	1.0	1.2	1.4	1.6	1.8	2.0
Home health	7.1	9.8	12.4	14.7	16.7	18.5	20.2
Skilled nursing facilities	3.7	4.7	5.7	6.4	6.9	7.4	7.9
Other part A	0.3	0.2	0.3	0.2	0.2	0.2	0.2
Administration (subject to appropriation)	1.2	1.2	1.3	1.3	1.4	1.4	1.5
B. General part A information:							
Indirect teaching payments	3.2	3.4	3.7	4.0	4.4	4.7	5.0
Direct medical education payments	1.3	1.3	1.3	1.3	1.5	1.5	1.6
Disproportionate share payments	2.3	2.4	2.6	2.9	3.1	3.4	3.6
Inpatient capital payments	7.2	8.2	9.2	10.3	11.4	12.5	13.8
HI trust fund income	92.9	98.0	101.6	106.6	111.0	114.2	116.8
HI trust fund surplus	10.9	6.7	-0.7	-7.2	-14.3	-22.7	-32.0
HI trust fund balance (EOY)	120.6	127.4	126.7	119.4	105.2	82.5	50.5
Other part A data:							
HI deductible (in CY dollars)	\$652	\$676	\$712	\$752	\$792	\$832	\$872
Part A FY enrollment (in millions)	34.4	35.1	35.8	36.4	37.0	37.5	38.0
PPS market basket increase FY (percent)	4.4	4.1	4.1	4.2	4.1	4.0	3.8
Monthly premium (in CY dollars)	\$192	\$221	\$243	\$266	\$288	\$310	\$333
Premium receipts	0.4	0.6	0.7	0.7	0.8	0.9	0.9

TABLE 16.—CBO BASELINE PROJECTIONS FOR MEDICARE PROGRAM COMPONENTS —Continued

[Outlays by fiscal year, in billions of dollars]							
	1992	1993	1994	1995	1996	1997	1998
II. Part B: Supplementary Medical Insurance (SMI)							
A. Total SMI outlays.....	50.3	58.0	67.3	77.7	88.5	100.3	113.4
Physicians.....	28.7	31.4	36.6	41.9	46.7	51.8	57.2
DME and P & O suppliers.....	1.7	2.0	2.3	2.6	2.9	3.3	3.8
Laboratories (independent) ¹	1.5	1.8	2.2	2.7	3.4	4.1	5.0
Outpatient hospital.....	10.6	12.4	14.6	17.4	20.5	24.0	27.9
Other part B.....	2.3	4.3	4.4	4.8	5.4	6.0	6.6
Administration (subject to appropriation).....	1.7	1.6	1.7	1.8	1.9	1.9	2.0
B. General part B information:							
SMI deductible (in dollars).....	\$100	\$100	\$100	\$100	\$100	\$100	\$100
MEI update (calendar year) (percent).....	3.1	2.7	2.6	2.7	2.6	2.6	2.6
Laboratory update (calendar year) (percent).....	2.0	2.0	3.0	2.7	2.7	2.7	2.8
DME update (calendar year) (percent).....	2.3	3.1	2.9	2.7	2.7	2.7	2.7
C. Premium information:							
Monthly premium (in dollars).....	\$31.80	\$36.60	\$41.10	\$46.10	\$47.30	\$48.60	\$50.00
Premium receipts.....	12.7	14.6	16.8	19.1	20.3	21.1	22.0
FY enrollment (in millions).....	33.6	34.3	34.9	35.5	36.0	36.5	36.9
Total Medicare disbursements.....	132.3	149.2	169.7	191.5	213.8	237.1	262.0
Total Medicare (disbursements net of premiums).....	119.1	134.1	152.3	171.6	192.6	215.1	239.1

¹ Laboratory services are also provided by physicians and outpatient hospitals. Spending for these services is included in the appropriate provider category.
Source: Congressional Budget Office.

MEDICARE AS SECONDARY PAYER

Under current law, Medicare is a secondary payer under specified circumstances when beneficiaries are covered by other third-party payers. Medicare is secondary payer to workers' compensation, automobile, medical, no-fault, and liability insurance.

Medicare is also secondary payer to certain employer health plans covering aged and disabled beneficiaries and for end stage renal disease (ESRD) beneficiaries during the first 18 months of a beneficiary's entitlement to Medicare on the basis of ESRD.

Table 17 shows savings attributable to these Medicare secondary payer provisions. In fiscal year 1985, combined Medicare part A and part B savings were \$750 million. By fiscal year 1992, the total savings equaled \$2.8 billion.

TABLE 17.—MEDICARE SAVINGS ATTRIBUTABLE TO SECONDARY PAYER PROVISIONS BY TYPE OF CIRCUMSTANCE

[In millions, by fiscal year]

	Workers compensa- tion	Working aged	ESRD	Automobile	Disability	Total
1985: ¹						
Part A	\$132.4	\$318.1	0	\$156.7	0	\$607.2
Part B	18.8	110.8	0	13.6	0	143.2
Total	151.2	428.9	0	170.3	0	750.4
1986:						
Part A	136.9	521.1	\$83.6	158.3	0	899.9
Part B	13.8	191.0	11.7	19.4	0	235.9
Total	150.7	712.1	95.3	177.7	0	1,135.8
1987: ²						
Part A	117.5	647.3	86.6	161.5	\$117.0	1,129.9
Part B	19.4	248.9	16.3	23.9	13.9	322.4
Total	136.9	896.2	102.9	185.4	130.9	1,452.3
1988:						
Part A	110.1	786.7	88.4	149.6	275.5	1,410.3
Part B	18.1	313.8	20.2	22.3	93.5	467.9
Total	128.2	1,100.5	108.6	171.9	369.0	1,878.2
1989:						
Part A	99.4	867.7	75.0	179.6	399.3	1,621.0
Part B	27.5	337.1	25.1	28.2	137.0	554.9
Total	126.9	1,204.8	100.1	207.8	536.3	2,175.9
1990:						
Part A	120.9	981.6	144.1	220.1	498.4	1,965.1
Part B	21.6	325.8	21.5	26.4	123.2	518.5
Total	142.5	1,307.4	165.6	246.5	621.6	2,483.6
1991:						
Part A	107.4	932.7	144.9	235.6	526.6	1,947.2
Part B	21.2	417.5	40.2	26.6	186.2	691.7
Total	128.6	1,350.2	185.1	262.2	712.8	2,638.9
1992:						
Part A	118.9	1,044.9	140.8	233.9	600.9	2,139.4
Part B	17.3	398.3	37.4	34.5	182.9	670.4
Total	136.2	1,443.2	178.2	268.4	783.8	2,809.8

¹ Savings from workers compensation and ESRD were combined under workers compensation in 1985.² Medicare secondary to disability insurance benefits was effective January 1, 1987.

Source: Health Care Financing Administration.

FINANCING

Background

The Medicare part A Hospital Insurance Trust Fund (HI) finances inpatient hospital, skilled nursing facility, home health and other institutional services. The part B Supplementary Medical Insurance Trust Fund (SMI) finances principally physician and hospital outpatient services.

The Hospital Insurance Trust Fund is financed primarily through Social Security payroll tax contributions paid by employers, employees and the self-employed. The payroll tax rate for HI for calendar year 1993 is 1.45 percent up to \$135,000 in earnings. The OASDI earnings base for 1993 is \$57,600. An equal contribution rate is paid by the employer. Table 18 shows the contribution rates and maximum taxable earnings for both HI and the old-age, survivors and disability insurance (OASDI) programs.

TABLE 18.—CURRENT LAW SOCIAL SECURITY PAYROLL TAX RATES FOR EMPLOYERS AND EMPLOYEES EACH AND TAXABLE EARNINGS BASES

Calendar year	Employee and employer rates, each (percent)			HI taxable earnings base	Maximum HI tax
	OASDI combined	HI	OASDHI combined		
1977	4.95	0.90	5.85	\$16,500	\$148.50
1978	5.05	1.10	6.05	17,700	194.70
1979	5.08	1.05	6.13	22,900	240.45
1980	5.08	1.05	6.13	25,900	271.95
1981	5.35	1.30	6.65	29,700	386.10
1982	5.40	1.30	6.70	32,400	421.20
1983	5.40	1.30	6.70	35,700	464.10
1984	5.70	1.30	7.00	37,800	491.40
1985	5.70	1.35	7.05	39,600	534.60
1986	5.70	1.45	7.15	42,000	609.00
1987	5.70	1.45	7.15	43,800	635.10
1988	6.06	1.45	7.51	45,000	652.50
1989	6.06	1.45	7.51	48,000	696.00
1990	6.20	1.45	7.65	51,300	743.85
1991	6.20	1.45	7.65	¹ 125,000	1,812.50
1992	6.20	1.45	7.65	² 130,200	1,887.90
1993	6.20	1.45	7.65	135,500	1,957.50
1994	6.20	1.45	7.65	140,700	2,040.15
1995	6.20	1.45	7.65	148,500	2,133.25

¹ The Omnibus Budget Reconciliation Act of 1990 created a separate taxable earnings base for HI. Prior to 1991, the OASDI and HI bases were the same.

² The maximum earnings subject to the tax increases each year in accordance with the increase in average earnings.

As table 19 demonstrates, the bulk of the financing for HI is derived from payroll taxes. In 1992, there was transferred an estimated \$329 million from the railroad retirement fund. This is the esti-

mated amount that would have been in the fund if railroad employment had always been covered under the Social Security Act.

HI benefits are provided to certain uninsured persons who became 72 before 1968. Such payments are made initially from the HI Trust Fund, with reimbursement from the general fund of the Treasury for the costs, including administrative expenses, of the payments. Approximately \$675 million will be transferred to HI during 1992 on this basis.

Certain persons not eligible for HI protection either on an insured basis or on the uninsured basis described in the previous paragraph may obtain protection by enrolling in the program and paying a monthly premium (\$221 in 1993). This accounts for \$578 million of financing in fiscal year 1993.

Sections 217(g) and 229(b) of the Social Security Act, prior to modification by the Social Security Amendments of 1983, authorized annual reimbursement from the general fund of the Treasury to the HI Trust Fund for costs arising from the granting of deemed wage credits for military service prior to 1957, according to quinquennial determinations made by the Secretary of Health and Human Services. These sections, as modified by the Social Security Amendments of 1983, provided for a lump sum transfer in 1983 for costs arising from such wage credits. In addition, the lump sum transfer included combined employer-employee HI taxes on the noncontributory wage credits for military service after 1965 and before 1984. After 1983, HI taxes on military wage credits are credited to the fund on July 1 of each year. The Social Security Amendments of 1983 also provided for (1) quinquennial adjustments to the lump sum amount transferred in 1983 for costs arising from pre-1957 deemed wage credits and (2) adjustments as deemed necessary to any previously transferred amounts representing HI taxes on noncontributory wage credits. In 1992, this accounts for \$86 million of income to the HI trust fund.

The remaining \$9,727 million in 1992 of receipts consisted almost entirely of interest on the investments of the trust fund and interest on interfund borrowing.

TABLE 19.—INCOME TO THE HOSPITAL INSURANCE AND SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS FOR SELECTED FISCAL YEARS, 1970-98 ¹

[In millions of dollars]

	Fiscal year ²									Percent of total 1994 financing	
	1970	1975	1980	1985	1990	1991	1992	1993	1994		1998
Hospital insurance:											
Payroll taxes	4,785	11,291	23,244	46,490	70,655	74,655	81,149	84,582	89,486	109,056	52.9
Transfers from railroad retirement account.....	64	132	244	371	367	352	329	388	392	408	0.2
Reimbursement for uninsured persons.....	617	481	697	766	413	605	675	367	506	208	0.3
Premiums from voluntary enrollment ³	0	6	17	38	113	367	439	578	654	963	0.4
Payments for military wage credits.....	11	48	141	86	107	-1,011	86	81	80	71	0.0
Transfer from SMI Trust Fund ⁴								1,772	0	0	0.0
Interest on investment and other income.....	137	609	1,072	3,182	7,908	8,969	9,727	10,202	10,518	6,101	6.2
Total.....	5,614	12,568	25,415	50,933	79,563	83,938	92,405	97,970	101,636	116,807	60.1
Supplementary medical insurance:											
Premiums ⁵	936	1,187	2,928	5,524	11,494	11,807	12,998	15,115	17,379	22,852	10.3
General revenues.....	928	2,330	6,932	17,898	33,210	34,730	38,684	45,478	48,706	92,176	28.8

TABLE 19.—INCOME TO THE HOSPITAL INSURANCE AND SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS FOR SELECTED FISCAL YEARS, 1970–98¹—
Continued

[In millions of dollars]

	Fiscal year ²										Percent of total 1994 financing
	1970	1975	1980	1985	1990	1991	1992	1993	1994	1998	
Interest and other income	12	105	415	1,555	1,434	1,629	1,402	1,460	1,357	1,595	0.8
Total.....	1,876	4,322	10,275	24,577	46,138	48,166	53,083	62,052	67,443	116,623	39.9
Grand total	7,490	18,890	35,690	75,510	125,701	132,104	145,488	160,022	169,079	233,430	100.0

¹ For fiscal years 1970 and 1975, the interval is from July 1 to June 30.

² Based upon CBO economic assumptions.

³ Medicaid payment of Medicare premiums is required on behalf of certain underpoverty persons on Medicaid, and over 65 years of age but not eligible for Medicare, effective January 1, 1989 according to the Medicare Catastrophic Coverage Act of 1988.

⁴ Part B premiums paid into SMI Trust Fund for Medicare Catastrophic benefits; 1989 repeal of the benefit required these funds to be transferred to the HI Trust Fund.

⁵ Includes SMI catastrophic premiums and supplemental catastrophic premium refund in fiscal year 1990.

⁶ Includes the impact of the Medicare Catastrophic Coverage Act of 1988 (Public Law 100-360).

Source: 1992 Annual Reports of the Board of Trustees of the Federal Hospital Insurance and Supplementary Medical Insurance Trust Funds and Congressional Budget Office for 1992–98 projections.

Part B, which is voluntary, is financed from premiums paid by the aged, disabled and chronic renal disease enrollees and from the general revenues. The premium rate is derived annually based upon the projected costs of the program for the coming year. Under prior law, the premium rate was changed on July 1 of each year. The Social Security Amendments of 1983 (Public Law 98-21) moved the premium increase date to January 1 of each year to coincide with the changed date for the annual Social Security cash benefit cost-of-living (COLA) increase.

Ordinarily, the premium rate is the lower of: (1) an amount sufficient to cover one-half of the costs of the program for the aged or (2) the current premium amount increased by the percentage by which cash benefits were increased under the COLA provisions of the Social Security program. Premium income, which originally financed half of the costs of part B, has declined—as a result of this formula—to less than 25 percent of total program income.

The Tax Equity and Fiscal Responsibility Act of 1982 (Public Law 97-248), temporarily suspended the COLA limitation for 2 years—calendar years 1984 and 1985. During this period, enrollee premiums were allowed to increase to amounts necessary to produce premium income equal to 25 percent of program costs for elderly enrollees. The Deficit Reduction Act of 1984 (Public Law 98-369) extended the TEFRA provision through calendar years 1986 and 1987. The 1987 reconciliation bill (Public Law 100-203) extended the provision through 1989 and the 1989 reconciliation bill extended the provision through 1990. The Omnibus Reconciliation Act of 1990 set the premium rates in law for the 1991-95 period. These premium rates are equal to 25 percent of program costs for these years. The flat premium for 1993 is \$36.60 per month.

FINANCIAL STATUS OF THE TRUST FUNDS

The Hospital Insurance Trust Fund balances are dependent upon the income to the HI trust fund primarily through payroll taxes exceeding the outlays for Medicare benefits and administrative costs. Outlays are affected by increases in inpatient hospital expenditures which have been rising at a faster rate than the income to the HI trust fund. Table 20 shows the percentage increase in Medicare outlays from fiscal year 1967 to fiscal year 1992 and the Congressional Budget Office (CBO) and HCFA projections from 1993 to 1998.

TABLE 20.—MEDICARE OUTLAYS, FISCAL YEARS 1967-98

	Part A ¹		Part B		Total	
	Dollars (in millions)	Percent increase (over prior year)	Dollars (in millions)	Percent increase (over prior year)	Dollars (in millions)	Percent increase (over prior year)
1967.....	2,597	.....	799	.....	3,396	.....
1968.....	3,815	46.9	1,532	91.7	5,347	57.4
1969.....	4,758	24.7	1,840	20.1	6,598	23.4
1970.....	4,953	4.1	2,196	19.3	7,149	8.4

TABLE 21.—MEDICARE OUTLAYS, FISCAL YEARS 1967–98—Continued

	Part A ¹		Part B		Total	
	Dollars (in millions)	Percent increase (over prior year)	Dollars (in millions)	Percent increase (over prior year)	Dollars (in millions)	Percent increase (over prior year)
1971	5,592	12.9	2,283	4.0	7,875	10.2
1972	6,276	12.2	2,544	11.4	8,820	12.0
1973	6,842	9.0	2,637	3.7	9,479	7.5
1974	8,065	17.9	3,283	24.5	11,348	19.7
1975	10,612	31.6	4,170	27.0	14,782	30.3
1976 ²	12,579	18.5	5,200	24.7	17,779	20.3
1977	15,207	20.9	6,342	22.0	21,549	21.2
1978	17,862	17.5	7,356	16.0	25,218	17.0
1979	20,343	13.9	8,814	19.8	29,157	15.6
1980	24,288	19.4	10,737	21.8	35,025	20.1
1981	29,260	20.5	13,228	23.2	42,488	21.3
1982	34,864	19.2	15,560	17.6	50,424	18.7
1983	38,624	10.8	18,311	17.7	56,935	12.9
1984	42,108	9.0	20,372	11.3	62,480	9.7
1985	48,654	15.5	22,730	11.6	71,384	14.3
1986	49,685	2.1	26,218	15.3	75,903	6.3
1987	50,803	2.3	30,837	17.6	81,640	7.6
1988	52,730	3.8	34,947	13.3	87,677	7.4
1989	58,238	10.4	38,317	9.6	96,555	10.1
1990	66,687	14.5	43,022	12.6	109,709	13.6
1991	69,638	4.4	47,019	9.2	116,657	6.3
1992	81,971	17.7	50,285	6.9	132,256	13.4
CBO projections ³						
1993	91,209	11.3	58,285	15.9	149,494	13.0
1994	102,393	12.3	67,299	15.5	169,692	13.5
1995	113,823	11.2	77,658	15.4	191,481	12.8
1996	125,238	10.0	88,538	14.0	213,776	11.6
1997	136,801	9.2	100,329	13.3	237,130	10.9
1998	148,647	8.7	113,391	13.0	262,038	10.5
HCFA projections ³						
1993	91,545	11.7	56,232	11.8	147,777	11.7
1994	103,047	12.6	64,307	14.4	167,354	13.2
1995	114,742	11.3	72,983	13.5	167,725	12.2
1996	127,542	11.2	82,634	13.2	210,275	12.0
1997	139,158	9.0	93,327	12.9	232,475	10.6
1998	150,102	7.9	105,218	12.8	255,399	9.9

¹ Includes Catastrophic Outlays beginning in fiscal year 1989. There are no catastrophic outlays after fiscal year 1990.

² In the transition quarter from July to October 1976 (when the beginning of the Federal fiscal year was changed), outlays were \$4,805 million. These outlays do not appear in the table.

³ Projections under current law.

Source: 1993 Annual Report of the Board of Trustees: HI Trust Fund and SMI Trust Fund, HCFA Office of the Actuary. For 1991 through 1998, HCFA Division of Budget and CBO.

Supplementary medical insurance

Because the Supplementary Medical Insurance (SMI) Trust Fund is financed through beneficiary premiums and the general revenues, it does not face the prospect of depletion as does the HI trust fund. However, the rapidly rising cost of health care is placing a heavy burden on the SMI trust fund—causing beneficiary premiums to rise and increasing the Federal deficit.

HI trust fund income, outlays, and balance

Table 21 shows the projections of the Congressional Budget Office and the administration for the HI trust funds with respect to income, outlays and balances for the years 1992 through 1998.

TABLE 21.—PROJECTIONS FOR THE HOSPITAL INSURANCE TRUST FUND, FISCAL YEARS 1992–1998 TOTAL OUTLAYS, INCOME, AND END-OF-YEAR BALANCES, UNDER CBO AND ADMINISTRATION BASELINE ASSUMPTIONS, PRESENT LAW

[By fiscal year, in billions of dollars]

	1992 ¹	1993	1994	1995	1996	1997	1998
Total outlays.....	82.0	81.2	102.4	113.8	125.2	136.8	148.8
Income ²	82.8	98.0	101.6	108.6	111.0	114.2	118.8
Net additions ³	10.9	8.8	−0.8	−7.2	−14.2	−22.6	−31.8
End-of-year balance ³	120.6	127.4	128.6	118.5	105.2	82.7	50.8
Beginning-of-year balance, as percent of outlays.....	133	132	124	111	95	77	56

¹ Actuals. ² Income to the trust funds include payroll tax receipts, interest on balances, and certain general fund transfers. ³ Fiscal year 1993 end-of-year balance reflects transfer from SMI Trust Fund of \$1,772 billion, related to catastrophic program. Note: Components may not add to totals due to rounding.

Source: Congressional Budget Office, and HCFA Division of Budget.

Sensitivity of HI trust funds balances to different outlay growth assumptions

Table 22 presents alternative projections of Hospital Insurance (HI) trust fund outlay growth through 2009. All of these projections assume the economic projections underlying the baseline path. The alternatives all are arranged in the table from least to most growth. Hospital outlays are projected to grow by 1 or 2 percent less and 1 or 2 percent more than the baseline in each year. These changes could be due to variations in hospital rate increases, admission patterns, intensity or change in case mix, or technology changes. The percentage refers to entire hospital outlays and not just those outlays covered by the prospective payment system.

Income to the trust fund is the same (except for interest which varies by size of trust fund balance) in each projection. Under the least growth alternative, expenditures are \$143 billion in fiscal year 1998 compared to \$149 billion in the baseline projection. Trust fund balances are \$34 billion greater in this alternative.

TABLE 22.—ALTERNATIVE PROJECTIONS OF HOSPITAL INSURANCE OUTLAY GROWTH AND YEAR-END BALANCES

[By fiscal year, in billions of dollars]

	1993	1994	1995	1996	1997	1998	1999	2000	2001
2 percent lower HI outlays growth:									
Outlays	89.8	98.8	108.4	119	131	143	157	173	190
End-of-year balance ²	129.1	132.2	131.1	124	110	85	50	0	(56)
1 percent lower HI outlays growth:									
Outlays	90.4	100.5	111.4	123	137	151	168	186	208
End-of-year balance ²	128.3	129.4	125.0	113	91	57	9	(58)	(145)
Baseline:									
Outlays	91.2	102.4	113.8	125	137	149	161	175	190
Income	98.0	101.6	106.8	111	114	117	118	120	120
Yearly surplus	6.8	(0.8)	(7.2)	(14)	(23)	(32)	(43)	(55)	(70)
End-of-year balance ²	127.4	126.6	119.5	105	83	51	8	(47)	(118)
1 percent higher HI outlay growth:									
Outlays	92.0	104.2	117.5	133	150	169	190	214	242
End-of-year balance ²	126.6	123.9	112.6	90	53	(1)	(78)	(181)	(316)
2 percent higher HI outlay growth:									
Outlays	92.8	106.1	120.7	137	156	178	202	230	262
End-of-year balance ²	125.7	121.0	106.3	79	34	(32)	(124)	(247)	(408)

	2002	2003	2004	2005	2006	2007e	2008	2009
2 percent lower HI outlay growth:								
Outlays.....	208	229	251	275	302	332	364	400
End-of-year balance ²	(151)	(257)	(390)	(550)	(743)	(972)	(1,244)	(1,565)
1 percent lower HI outlay growth:								
Outlays.....	228	252	280	310	343	380	421	466
End-of-year balance ²	(257)	(397)	(571)	(782)	(1,036)	(1,340)	(1,702)	(2,130)
Baseline:								
Outlays.....	207	225	245	267	282	318	348	361
Income.....	119	117	117	123	131	139	145	156
Yearly surplus.....	(88)	(108)	(129)	(145)	(161)	(178)	(200)	(224)
End-of-year balance ²	(205)	(314)	(445)	(502)	(788)	(1,007)	(1,266)	(1,569)
1 percent higher HI outlay growth:								
Outlays.....	273	307	347	391	441	497	550	632
End-of-year balance ²	(488)	(704)	(973)	(1,301)	(1,700)	(2,180)	(2,756)	(3,444)
2 percent higher HI outlay growth:								
Outlays.....	298	339	385	438	499	567	645	734
End-of-year balance ²	(613)	(873)	(1,195)	(1,591)	(2,074)	(2,558)	(3,362)	(4,206)

¹ Actuals.

² Projections for fiscal years 1989 through 1998 assume economic and technical assumptions used in CBO baseline. Projections for fiscal years 1999-2015 are made by committee staff using the average of the growth rates for outlays and revenues in the last 2 years of CBO's baseline estimate. Outlay growth rates were further adjusted for changes in projected part A enrollment.

TABLE 23.—ACTUARIAL BALANCES OF THE HOSPITAL INSURANCE PROGRAM, UNDER ALTERNATIVE SETS OF ASSUMPTIONS

[In percent]

	Alternative		
	I	II	III
Projection periods			
1993–2017:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ²	3.99	5.01	6.36
Actuarial balance ³	–1.09	–2.11	–3.46
1993–2042:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ²	4.52	6.84	10.81
Actuarial balance ³	–1.62	–3.94	–7.91
1993–2067:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ²	4.94	8.01	13.51
Actuarial balance ³	–2.04	–5.11	–10.61
25-year subperiods			
1993–2017:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ⁴	3.99	4.94	6.18
Actuarial balance ³	–1.09	–2.04	–3.28
2018–2042:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ⁴	5.15	9.04	16.08
Actuarial balance ³	–2.25	–6.14	–13.18
2043–2067:			
Summarized tax rate ¹	2.90	2.90	2.90
Summarized cost rate ⁴	6.08	11.48	21.96
Actuarial balance ³	–3.18	–8.58	–19.06

¹ As scheduled under present law.² Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the level-financing basis, including the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.³ Difference between the summarized tax rate (as scheduled under present law) and the summarized cost rate.⁴ Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the present-value basis. Includes neither the trust fund balance at the beginning of the period nor the cost of attaining a non-zero trust fund balance at the end of the period.

Source: Table 1.D.3 in the 1993 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund.

Long-range estimates

Long-range estimates for the next 75 years (1993–2067) are shown in table 23 for the HI program under all three alternative assumptions shown in the 1993 HI Trustees' report. As in the case of the OASDI program, annual expenditures are expressed as a percentage of taxable earnings. The income rate is simply the combined scheduled HI tax rate for employees and employers.

The average deficit over the next 25-year period is 2.11 percent of taxable earnings under alternative II assumptions. Over the next 75 years, it would be 5.11 percent of taxable earnings, or more than 175 percent higher than the tax rate now scheduled in the law for the future. In other words, the tax rate would have to be increased by 175 percent or program costs would have to be reduced by nearly 65 percent to restore actuarial solvency.

MEDICARE HISTORICAL DATA

Tables 24 through 38 present detailed historical data on the Medicare program. Tables 24 through 26 present detailed enrollment data. Table 27 describes the percentage of Medicare enrollees participating in a State buy-in agreement. Tables 28 and 29 show the distribution of Medicare payments by type of coverage and type of service. Tables 30 and 31 show the number of persons served and average reimbursement amounts per person and per enrollee. Tables 32–36 present the use of inpatient hospital services, skilled nursing facility services, home health agency services and beneficiaries under the ESRD program. Table 37 presents Medicare utilization and reimbursement by State and table 38 shows the number of Medicare enrollees in prepaid health plans.

TABLE 24.—NUMBER OF MEDICARE ENROLLEES, BY TYPE OF COVERAGE AND TYPE OF ENTITLEMENT, FOR SELECTED YEARS

Type of entitlement and coverage	Number of Medicare enrollees as of July 1—							Average annual percent growth rate				
	1968	1975	1980	1982	1984	1986	1988	1990	1991	1968-75	1975-82	1982-91
Total:												
HI ¹ and/or SMI ²	19,821	24,959	28,478	29,494	30,456	31,750	32,980	34,203	34,870	3.3	2.4	1.9
Total HI	19,770	24,640	28,067	29,069	29,996	31,216	32,413	33,719	34,429	3.2	2.4	1.9
HI only	1,016	1,054	1,079	1,082	1,040	1,160	1,363	1,574	1,633	5	0.4	4.7
Total SMI	18,805	23,905	27,400	28,412	29,416	30,590	31,617	32,629	33,237	3.5	2.5	1.8
SMI only	51	318	411	425	460	534	567	484	441	29.9	4.2	0.4
Aged:												
HI and/or SMI	19,821	27,790	25,515	26,540	27,571	28,791	29,879	30,948	31,485	4.9	-0.7	1.9
Total HI	19,770	22,472	25,104	26,115	27,112	28,257	29,312	30,464	31,043	1.8	2.2	1.9
HI only	1,016	845	835	833	807	928	1,098	1,263	1,300	-2.6	-0.2	5.1
Total SMI	18,805	21,945	24,680	25,707	26,765	27,863	28,780	29,686	30,185	2.2	2.3	1.8
SMI only	51	318	411	425	459	534	557	484	441	29.9	4.2	0.4
All disabled: ³												
HI and/or SMI	(4)	2,168	2,963	2,954	2,884	2,959	3,102	3,255	3,385	.....	4.5	1.5
Total HI	(4)	2,168	2,963	2,954	2,884	2,959	3,101	3,255	3,385	.....	4.5	1.5
HI only	(4)	209	244	249	233	232	265	311	333	.....	2.5	3.3
Total SMI	(4)	1,959	2,719	2,705	2,651	2,727	2,837	2,943	3,052	.....	4.7	1.4
End-State renal disease only: ³												
HI and/or SMI	(4)	13	28	27	30	39	53	65	69	.....	11.0	11.0
Total HI	(4)	13	28	27	30	39	53	65	69	.....	11.0	11.0
HI only	(4)	1	1	2	2	3	4	6	6	.....	10.4	13.0
Total SMI	(4)	12	27	26	28	36	49	59	62	.....	11.7	10.1

¹ Hospital insurance.² Supplementary medical insurance.³ Disabled and ESRD only must have HI to be eligible for SMI coverage.⁴ Medicare disability entitlement began in 1973.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, "Annual Program Statistics" and unpublished data.

TABLE 25.—GROWTH IN NUMBER OF AGED MEDICARE ENROLLEES, BY SEX AND AGE, FOR SELECTED YEARS

Sex and age	Number of enrollees (in thousands)										Average annual percent growth rate			Enrollees as percent of total aged population 1990 ¹
	1968	1975	1980	1982	1986	1988	1989	1990	1991	1968-75	1975-82	1982-91	Total population 1990 ¹	
All persons.....	19,496	22,548	25,515	26,540	28,791	29,879	30,409	30,948	31,485	2.1	2.4	1.9	31,079	99.6
65 to 69	6,551	7,642	8,459	8,652	9,163	9,469	9,659	9,695	9,690	2.2	1.8	1.3	10,066	96.3
70 to 74	5,458	5,950	6,756	7,022	7,564	7,752	7,775	7,951	8,163	1.2	2.4	1.7	7,980	99.6
75 to 79	3,935	4,313	4,809	5,064	5,573	5,792	5,931	6,058	6,175	1.3	2.3	2.2	6,103	99.3
80 to 84	2,249	2,793	3,081	3,185	3,559	3,764	3,856	3,957	4,065	3.1	1.9	2.7	3,909	101.2
85 and over.....	1,303	1,850	2,410	2,617	2,932	3,102	3,187	3,286	3,393	5.1	5.1	2.9	3,021	108.8
Males.....	8,177	9,201	10,268	10,653	11,525	11,967	12,187	12,416	12,650	1.7	2.1	1.9	12,493	99.4
65 to 69	2,944	3,420	3,788	3,881	4,109	4,245	4,331	4,352	4,358	2.2	1.8	1.3	4,631	94.0
70 to 74	2,322	2,504	2,841	2,958	3,214	3,308	3,323	3,406	3,505	1.1	2.4	1.9	3,399	100.2
75 to 79	1,596	1,669	1,854	1,956	2,160	2,257	2,321	2,382	2,441	.6	2.3	2.5	2,389	99.7
80 to 84	854	1,005	1,062	1,093	1,221	1,296	1,330	1,369	1,411	2.2	1.2	2.9	1,356	101.0
85 and over.....	450	604	722	764	822	861	881	906	934	4.3	3.4	2.3	841	107.7
Females.....	11,319	13,347	15,247	15,887	17,266	17,912	18,222	18,532	18,835	2.4	2.5	1.9	18,586	99.7
65 to 69	3,606	4,222	4,671	4,771	5,054	5,224	5,328	5,343	5,332	2.3	1.8	1.2	5,558	96.1
70 to 74	3,136	3,446	3,914	4,064	4,350	4,444	4,452	4,545	4,657	1.4	2.4	1.5	4,580	99.2
75 to 79	2,338	2,644	2,954	3,108	3,414	3,534	3,610	3,676	3,734	1.8	2.3	2.1	3,714	99.0
80 to 84	1,386	1,788	2,019	2,092	2,339	2,468	2,526	2,588	2,653	3.7	2.3	2.7	2,553	101.4
85 and over.....	853	1,246	1,689	1,853	2,110	2,241	2,306	2,380	2,459	5.6	5.8	3.2	2,180	109.2

¹ Total aged population data reflect United States residents

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, unpublished data; and U.S. Department of Commerce, Bureau of the Census.

TABLE 26.—GROWTH IN NUMBER OF DISABLED MEDICARE ENROLLEES WITH HI COVERAGE, BY TYPE OF ENTITLEMENT AND AGE, FOR SELECTED YEARS

Type of entitlement and age	Number of enrollees					Average annual percent growth rate				
	1975	1980	1982	1984	1988	1990	1991	1975-82	1982-88	1982-91
All disabled persons.....	2,058,424	2,425,231	2,415,646	2,884,410	3,101,482	3,254,983	3,385,439	2.3	4.3	3.8
Under age 35.....	238,070	193,392	195,918	388,240	471,129	483,262	494,285	-2.7	15.7	10.8
35 to 44.....	251,142	258,374	268,948	422,207	572,408	654,953	711,364	1.0	13.4	11.4
45 to 54.....	508,345	572,823	532,020	584,214	670,131	741,193	790,435	.7	3.9	4.5
55 to 64.....	1,060,967	1,400,642	1,418,762	1,489,749	1,397,814	1,375,575	1,389,355	4.2	-2	-2
Disabled workers.....	1,638,662	2,396,897	2,388,299	2,309,866	2,456,135	2,579,097	2,693,502	5.5	.5	1.3
Under age 35.....	100,439	184,619	187,514	193,094	249,291	257,760	268,392	9.3	4.9	4.1
35 to 44.....	164,439	253,186	264,036	414,749	264,036	482,071	530,417	7.0	7.8	8.1
45 to 54.....	426,451	565,846	525,384	485,378	552,442	612,692	657,358	3.0	.8	2.5
55 to 64.....	947,333	1,393,246	1,411,365	1,340,999	1,239,653	1,226,574	1,237,335	5.9	-2.1	-1.5
Adults disabled as children.....	324,864	409,072	439,293	459,620	519,009	542,416	553,388	4.4	2.8	2.6
Under age 35.....	153,708	173,689	181,752	186,003	207,331	208,901	208,536	2.4	2.2	1.5
35 to 44.....	84,508	105,092	117,056	126,252	146,460	158,725	165,569	4.8	3.8	3.9
45 to 54.....	71,484	80,381	84,332	87,380	99,444	107,092	110,279	2.4	2.8	3.0
55 to 64.....	45,164	49,910	56,153	59,985	65,774	67,698	69,004	3.2	2.7	2.3
Widows and widowers.....	83,771	110,785	99,269	85,227	73,101	68,793	69,753	2.5	-5.0	-3.8
Under age 35.....	1	1	1	1	1	1	1			
35 to 44.....	NA	7,576	5,806	4,608	5,685	5,615	6,112	-3.5	-4	.6
45 to 54.....	7,445	103,208	93,462	80,618	67,416	63,178	63,641	2.9	-5.3	-4.2
55 to 64.....	76,325	28,334	27,347	29,697	53,237	64,677	68,796	13.7	11.7	10.8
End-stage renal disease only.....	11,127	8,773	8,404	9,143	14,507	16,601	17,357	12.3	9.5	8.4
Under age 35.....	3,729	5,188	4,912	5,559	11,199	14,157	15,378	12.3	14.7	13.5
35 to 44.....	2,187	6,977	6,636	6,848	12,560	15,794	16,686	12.2	11.2	10.8
45 to 54.....	2,966	7,396	7,397	8,147	14,971	18,125	19,375	18.6	12.5	11.3
55 to 64.....	2,245									

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, unpublished data.

TABLE 27.—MEDICARE ENROLLMENT: NUMBER AND PERCENTAGE OF INDIVIDUALS ENROLLED IN SUPPLEMENTARY MEDICAL INSURANCE (SMI) UNDER BUY-IN AGREEMENTS, BY TYPE OF BENEFICIARY AND BY YEAR OR 1991 AREA OF RESIDENCE

Year or area of residence ¹	All persons		Aged		Disabled	
	Number in thousands	Percent of SMI enrolled	Number in thousands	Percent of SMI enrolled	Number in thousands	Percent of SMI enrolled
Year:						
1968.....	1,648	8.8	1,648	8.8	NA	NA
1975.....	2,846	12.0	2,483	11.4	363	18.7
1980.....	2,954	10.9	2,449	10.0	504	18.9
1981.....	3,257	11.7	2,659	10.6	598	21.7
1982.....	2,791	9.8	2,288	8.9	503	18.6
1983.....	2,654	9.3	2,177	8.4	477	18.1
1984.....	2,601	8.9	2,127	8.0	474	18.2
1985.....	2,670	9.0	2,164	8.0	505	19.2
1986.....	2,776	9.2	2,222	8.0	554	20.9
1987.....	2,985	9.6	2,337	8.2	648	23.2
1988.....	3,033	9.6	2,341	8.1	691	24.4
1989.....	3,351	10.4	2,549	8.7	802	27.8
1990.....	3,604	11.0	2,714	9.1	890	30.2
1991.....	3,766	10.4	2,817	8.7	949	27.8
Area of residence ¹						
All areas.....	3,766	10.4	2,817	8.7	949	27.8
United States.....	3,765	11.4	2,816	9.6	949	32.8
Alabama.....	100	17.5	79	16.1	21	30.0
Alaska.....	5	20.0	4	20.0	1	33.3
Arizona.....	31	6.2	23	5.2	8	21.1
Arkansas.....	67	17.4	53	15.9	14	31.8
California.....	658	20.4	503	17.4	155	57.4
Colorado.....	38	10.7	28	9.0	10	32.3
Connecticut.....	26	5.7	16	3.8	10	33.3
Delaware.....	5	5.7	3	3.8	2	25.0
District of Columbia.....	13	18.3	10	15.4	3	50.0
Florida.....	207	8.8	166	7.8	41	26.8
Georgia.....	133	18.3	104	16.9	29	31.9
Hawaii.....	12	9.8	10	8.9	2	25.0
Idaho.....	10	7.6	7	5.9	3	30.0
Illinois.....	99	6.6	69	5.1	30	24.8
Indiana.....	62	8.3	43	6.4	19	27.1
Iowa.....	42	9.4	30	7.2	12	38.7
Kansas.....	28	7.8	21	6.4	7	29.2
Kentucky.....	78	14.8	58	12.9	20	29.0
Louisiana.....	91	17.6	70	15.9	21	31.8
Maine.....	23	12.8	16	9.9	7	41.2
Maryland.....	50	9.5	38	8.0	12	29.3

TABLE 27.—MEDICARE ENROLLMENT: NUMBER AND PERCENTAGE OF INDIVIDUALS ENROLLED IN SUPPLEMENTARY MEDICAL INSURANCE (SMI) UNDER BUY-IN AGREEMENTS, BY TYPE OF BENEFICIARY AND BY YEAR OR 1991 AREA OF RESIDENCE—Continued

Year or area of residence ¹	All persons		Aged		Disabled	
	Number in thousands	Percent of SMI enrolled	Number in thousands	Percent of SMI enrolled	Number in thousands	Percent of SMI enrolled
Massachusetts.....	90	10.9	65	8.6	25	39.7
Michigan.....	95	7.8	61	5.7	34	28.3
Minnesota.....	43	7.4	29	5.5	14	35.9
Mississippi.....	93	25.9	74	24.3	19	38.0
Missouri.....	58	7.6	41	6.0	17	24.6
Montana.....	10	8.6	7	6.8	3	27.3
Nebraska.....	13	5.6	8	3.7	5	33.3
Nevada.....	10	7.0	8	6.6	2	16.7
New Hampshire.....	5	3.7	3	2.5	2	20.0
New Jersey.....	98	9.2	74	7.6	24	30.0
New Mexico.....	23	13.0	18	11.7	5	29.4
New York.....	263	10.9	191	8.7	72	34.8
North Carolina.....	124	13.9	97	12.6	27	27.6
North Dakota.....	5	5.2	3	3.4	2	33.3
Ohio.....	118	7.8	88	6.5	30	21.3
Oklahoma.....	53	12.0	42	10.5	11	30.6
Oregon.....	30	7.2	21	5.6	9	29.0
Pennsylvania.....	131	6.9	89	5.1	42	29.4
Rhode Island.....	11	7.2	7	5.1	4	33.3
South Carolina.....	83	18.9	64	17.2	19	34.5
South Dakota.....	10	9.3	7	7.1	3	42.9
Tennessee.....	118	17.3	89	15.1	29	36.7
Texas.....	243	13.4	197	12.2	46	31.1
Utah.....	11	7.0	7	4.9	4	36.4
Vermont.....	8	11.0	6	9.1	2	32.9
Virginia.....	82	11.5	62	10.0	20	28.2
Washington.....	56	9.2	39	7.2	17	35.4
West Virginia.....	30	9.9	21	8.1	9	22.0
Wisconsin.....	69	9.8	44	6.9	25	42.4
Wyoming.....	4	7.7	3	6.5	1	25.0
Puerto Rico ²	0	0.0	0	0.0	0	0.0
Guam and Virgin Islands ³	1	15.2	1	16.7	0	0.0

¹ State of residence is not necessarily State that bought coverage.

² No State buy-in agreement.

³ Data for these areas combined to prevent disclosure of confidential information.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, "HCFA Statistics" and unpublished data.

TABLE 28.—DISTRIBUTION OF MEDICARE BENEFIT PAYMENTS, BY TYPE OF COVERAGE AND TYPE OF SERVICE, AND BY YEAR OR TYPE OF ENROLLEE—
Continued

Type of coverage and type of service	Amount and distribution of payments for all enrollees											
	1986		1987		1988		1989		1990		1991	
	Amount	Per- cent	Amount	Per- cent	Amount	Per- cent	Amount	Per- cent	Amount	Per- cent	Amount	Per- cent
Total payments (millions)	75,844	100.0	80,162	100.0	86,318	100.0	98,097	100.0	108,518	91.5	118,653	100.0
Hospital insurance	49,605	65.4	49,342	61.6	52,349	60.6	59,803	61.0	66,050	55.7	71,317	60.1
Inpatient	46,746	61.6	46,446	57.9	49,265	57.1	54,277	55.3	59,301	50.0	62,979	53.1
Skilled nursing facility	587	.8	631	.8	666	.8	2,783	2.8	2,876	2.4	2,537	2.1
Home health agency	2,230	2.9	2,195	2.7	2,320	2.7	2,608	2.7	3,517	3.0	5,234	4.4
Hospice	42	.1	70	.1	98	.1	135	.1	356	.3	567	.5
Supplementary medical insurance	26,239	34.6	30,820	38.4	33,969	39.4	38,294	39.0	42,468	35.8	47,336	39.9
Physicians'	19,212	25.3	22,619	28.2	24,355	28.2	27,075	27.6	29,635	25.0	32,319	27.2
Outpatient hospital	5,144	6.8	5,903	7.4	6,545	7.6	7,675	7.8	8,473	7.1	9,783	8.2
Home health agency	45	.1	52	.1	52	.1	60	.1	82	.1	65	.1
Group practice plan	1,113	1.5	1,361	1.7	2,019	2.3	2,308	2.4	2,827	2.4	3,531	3.0
Independent laboratory	725	1.0	885	1.1	998	1.2	1,176	1.2	1,451	1.2	1,638	1.4

Source: Health Care Financing Administration, Bureau of Data Management and Strategy and Office of the Actuary, unpublished data.

TABLE 29.—DISTRIBUTION OF MEDICARE BENEFIT PAYMENTS, BY TYPE OF COVERAGE AND TYPE OF SERVICE, AND BY TYPE OF ENROLLEE, 1991

	1991 payments by type of enrollee, calendar year—					
	All enrollees			Aged		Disabled
	Amount (in millions)	Percentage distribution	Amount (in millions)	Percentage distribution	Amount (in millions)	Percentage distribution
Total payments (millions)	118,653	100.0	105,444	100.0	13,209	100.0
Hospital insurance.....	71,317	60.1	63,650	60.4	7,667	58.0
Inpatient.....	62,979	53.1	55,821	52.9	7,158	54.2
Skilled nursing facility	2,537	2.1	2,433	2.3	104	0.8
Home health agency.....	5,234	4.4	4,857	4.6	377	2.9
Hospice	567	0.5	539	0.5	28	0.2
Supplementary medical insurance.....	47,336	39.9	41,794	39.6	5,542	42.0
Physicians'	32,319	27.2	29,173	27.7	3,146	23.8
Outpatient hospital.....	9,783	8.2	7,891	7.5	1,892	14.3
Home health agency.....	65	0.1	65	0.1	0	0.0
Group practice plan	3,531	3.0	3,188	3.0	343	2.6
Independent laboratory	1,638	1.4	1,477	1.4	161	1.2

Source: Health Care Financing Administration, Bureau of Data Management and Strategy and Office of the Actuary, unpublished data.

TABLE 30.—PERSONS SERVED AND REIMBURSEMENTS FOR AGED MEDICARE ENROLLEES, BY TYPE OF COVERAGE AND BY YEAR OR 1991 DEMOGRAPHIC CHARACTERISTICS

Year, period, or 1991 characteristic	Hospital insurance and/or supplementary medical insurance			Hospital insurance			Supplementary medical insurance		
	Hospital insurance			Supplementary medical insurance			Supplementary medical insurance		
	Persons served per 1,000 enrollees	Reimbursements Per person served	Per enrollee	Persons served per 1,000 enrollees	Reimbursements Per person served	Per enrollee	Persons served per 1,000 enrollees	Reimbursements Per person served	Per enrollee
Year:									
1968.....	397.8	\$670	\$267	204.0	\$934	\$191	394.8	\$204	\$81
1975.....	527.9	1,055	557	220.9	1,855	410	536.0	296	159
1980.....	637.7	1,791	1,142	240.0	3,379	811	652.3	545	356
1981.....	655.0	2,024	1,326	243.4	3,877	944	669.5	613	410
1982.....	641.4	2,439	1,565	250.7	4,462	1,119	653.8	733	479
1983.....	660.2	2,611	1,724	250.9	4,804	1,205	672.2	825	555
1984.....	685.7	NA	NA	239.6	NA	NA	698.9	NA	NA
1985.....	722.1	2,762	1,995	218.8	6,167	1,350	739.1	933	690
1986.....	731.7	2,870	2,100	213.0	6,528	1,390	750.8	1,012	760
1987.....	754.1	3,025	2,281	209.8	6,903	1,448	775.9	1,148	891
1988.....	767.8	3,178	2,440	207.5	7,515	1,559	792.5	1,192	945
1989.....	784.9	3,445	2,704	206.1	8,196	1,689	812.8	1,338	1,088
1990.....	801.6	3,578	2,869	209.0	8,520	1,781	831.6	1,399	1,163
1991.....	800.1	3,906	3,125	211.8	9,349	1,980	830.0	1,473	1,223
Annual percentage change in period:									
1968 to 1975.....	4.1	6.7	11.1	1.1	10.3	11.5	4.5	5.5	10.2
1975 to 1981.....	3.7	11.5	15.6	1.6	13.1	14.9	3.8	12.9	17.2
1981 to 1991.....	2.0	6.8	9.0	-1.4	9.2	7.7	2.5	10.2	13.0
Age:									
65 and 66 years.....	756.1	\$2,688	\$2,032	134.1	\$9,001	\$1,207	825.0	\$1,118	\$923

67 and 68 years	714.4	3,136	2,240	142.1	9,365	1,331	758.5	1,304	989
69 and 70 years	751.0	3,416	2,565	161.1	9,586	1,544	781.8	1,395	1,091
71 and 72 years	772.0	3,691	2,849	176.9	9,858	1,744	792.3	1,470	1,165
73 and 74 years	800.8	3,915	3,135	197.2	9,801	1,933	815.3	1,541	1,256
75 to 79 years	835.7	4,282	3,578	234.8	9,650	2,265	848.2	1,621	1,375
80 to 84 years	865.9	4,655	4,031	287.9	9,228	2,657	878.3	1,651	1,450
85 years and over	885.8	4,927	4,364	351.7	8,654	3,044	926.3	1,539	1,425
Sex:									
Male.....	759.1	4,370	3,317	216.9	9,810	2,128	796.0	1,607	1,279
Female.....	827.6	3,620	2,996	208.4	9,024	1,880	852.3	1,391	1,186
Race:									
White	808.6	3,845	3,110	212.4	9,215	1,958	835.7	1,453	1,214
All other	737.5	4,554	3,359	211.3	10,614	2,242	781.8	1,691	1,322
Census region:									
Northeast	831.6	4,204	3,496	214.9	10,450	2,245	861.8	1,550	1,336
North Central	824.4	3,647	3,006	218.6	8,860	1,937	843.4	1,322	1,115
South	831.5	3,869	3,217	231.2	8,728	2,108	852.3	1,478	1,259
West	718.4	4,064	2,920	173.4	10,511	1,822	737.4	1,608	1,186

NA—Not available.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, "Annual Medicare Program Statistics."

TABLE 31.—PERSONS SERVED AND REIMBURSEMENTS FOR DISABLED MEDICARE ENROLLEES, BY TYPE OF COVERAGE AND BY YEAR OR 1991
DEMOGRAPHIC CHARACTERISTICS

Year, period or 1991 characteristic	Hospital insurance and/or supplementary medical insurance			Hospital insurance			Supplementary medical insurance		
	Hospital insurance		Persons served per 1,000 enrollees	Supplementary medical insurance		Persons served per 1,000 enrollees	Hospital insurance		Persons served per 1,000 enrollees
	Reimbursements	Per person served		Reimbursements	Per person served		Reimbursements	Per person served	
Year:									
1968.....	NA	NA	NA	NA	NA	NA	NA	NA	NA
1975.....	449.5	\$1,548	\$696	219.2	\$2,077	471.4	\$455	\$565	\$266
1980.....	594.1	2,544	1,511	245.7	3,798	633.8	933	994	630
1981.....	615.2	2,881	1,772	251.4	4,400	655.9	1,106	1,104	724
1982.....	608.9	3,431	2,089	256.9	5,110	650.5	1,313	1,303	848
1983.....	628.8	3,658	2,300	257.7	5,550	670.1	1,430	1,412	946
1984.....	639.5	NA	NA	242.6	NA	683.5	NA	NA	NA
1985.....	668.8	3,855	2,578	227.9	7,224	715.5	1,646	1,414	1,012
1986.....	681.0	4,032	2,746	226.3	7,623	729.0	1,725	1,519	1,107
1987.....	695.7	3,994	2,778	219.4	7,610	747.8	1,670	1,611	1,205
1988.....	703.7	4,115	2,896	209.3	8,373	760.0	1,753	1,644	1,249
1989.....	721.3	4,531	3,268	208.0	9,482	785.0	1,972	1,817	1,426
1990.....	734.3	4,703	3,453	208.9	9,847	803.5	2,057	1,922	1,544
1991.....	728.5	5,070	3,693	208.7	10,634	799.0	2,219	2,047	1,635
Annual percentage change in period:									
1968 to 1975.....	NA	NA	NA	NA	NA	NA	NA	NA	NA
1975 to 1981.....	5.37	10.91	16.86	2.31	13.33	5.66	15.95	11.81	18.14
1981 to 1991.....	1.70	5.81	7.62	-1.84	9.23	1.99	7.21	6.37	8.49

TABLE 32.—USE OF INPATIENT HOSPITAL SERVICES BY MEDICARE ENROLLEES, BY TYPE OF ENROLLEE AND TYPE OF HOSPITAL: CALENDAR YEAR 1991 ¹

Type of enrollee and type of hospital	Bills ²		Covered days of care			Reimbursements in dollars		
	Number in thousands	Per enrollees	Number in thousands	Per bill	Per 1,000 enrollees	Amount in millions	Per bill	Per enrollee
All enrollees:								
All hospitals	11,426	328	95,569	8.4	2,741	62,122	5,437	1,782
Short-stay	10,917	313	90,381	8.3	2,592	60,255	5,519	1,728
Long-stay	509	15	5,188	10.2	149	1,867	3,665	54
Psychiatric	287	8	2,660	9.3	76	726	2,529	21
All other	222	6	2,527	11.4	72	1,141	5,130	33
Aged:								
All hospitals	9,982	317	83,786	8.4	2,661	54,981	5,508	1,746
Short-stay	9,679	307	80,450	8.3	2,555	53,644	5,543	1,704
Long-stay	304	10	3,337	11.0	106	1,337	4,401	42
Psychiatric	104	3	1,041	10.0	33	310	2,981	10
All other	200	6	2,295	11.5	73	1,027	5,140	33
Disabled:								
All hospitals	1,444	426	11,783	8.2	3,480	7,140	4,945	2,109
Short-stay	1,238	366	9,931	8.0	2,933	6,610	5,338	1,953
Long-stay	206	61	1,852	9.0	547	530	2,578	157
Psychiatric	183	54	1,619	8.8	478	416	2,272	123
All other	23	7	232	10.2	68	114	5,047	34

¹ Preliminary data. Detail may not add due to rounding.

² Discharges not available by type of hospital.

Note: Only services rendered by inpatient hospitals are included.

Source: Health Care Financing Administration, Bureau of Management and Strategy, unpublished data.

TABLE 33.—USE OF SHORT-STAY HOSPITAL SERVICES BY AGED MEDICARE ENROLLEES, BY FISCAL YEAR OR 1990 DEMOGRAPHIC CHARACTERISTICS

Calendar year, period, or 1990 characteristic	Aged hospital insurance enrollees (in thousands) ¹	Discharges		Total days of care			Total charges			
		Number (in thousands)	Per 1,000 enrollees	Number (in thousands)	Per discharge	Per 1,000 enrollees	Total charges (in millions)	Per discharge	Per covered day of care	Per enrollee
Year:										
1975.....	22,472	7,285	324	81,592	11.2	3,631	11,853	1,627	145	527
1980.....	25,104	9,051	361	96,772	10.7	3,855	28,114	3,106	291	1,120
1982.....	26,115	9,817	376	100,431	10.0	3,846	40,875	4,164	407	1,565
1983.....	26,670	10,152	381	99,740	9.9	3,740	47,851	4,713	480	1,794
1984.....	27,112	9,705	358	86,062	8.9	3,174	46,964	4,839	546	1,732
1985.....	27,683	8,918	322	76,926	8.6	2,779	47,371	5,312	616	1,711
1986.....	28,257	8,917	316	77,240	8.7	2,733	52,623	5,901	681	1,862
1987.....	28,822	9,000	312	79,804	8.9	2,769	60,900	6,767	763	2,113
1988 ²	29,312	9,146	312	80,938	8.8	2,761	69,920	7,645	864	2,385
1989.....	29,869	9,026	302	79,784	8.8	2,671	78,204	8,664	980	2,618
1990.....	30,948	10,522	340	92,735	8.8	2,996	102,544	9,746	1,106	3,313
Annual percentage change in period:										
1975-1982.....	2.2	4.4	2.1	3.0	-1.6	0.8	19.3	14.4	15.9	16.8
1982-1990.....	2.1	0.9	-1.2	-1.0	-1.6	-3.1	12.2	11.2	13.3	9.8
Age:										
65-69 years.....	9,695	NA	NA	NA	NA	NA	NA	NA	NA	NA
70-74 years.....	7,951	NA	NA	NA	NA	NA	NA	NA	NA	NA
75-79 years.....	6,058	NA	NA	NA	NA	NA	NA	NA	NA	NA
80-84 years.....	3,957	NA	NA	NA	NA	NA	NA	NA	NA	NA
85 years or over.....	3,286	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sex:										
Male.....	12,416	NA	NA	NA	NA	NA	NA	NA	NA	NA
Female.....	18,532	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 34.—USE OF SHORT-STAY HOSPITAL SERVICES BY AGED MEDICARE ENROLLEES, BY FISCAL YEAR OR 1990 DEMOGRAPHIC CHARACTERISTICS—
Continued

Calendar year, period, or 1990 characteristic	Aged hospital insurance enrollees (in thousands) ¹	Discharges		Total days of care			Total charges				
		Number (in thousands)	Per 1,000 enrollees	Number (in thousands)	Per discharge	Per 1,000 enrollees	Total charges (in millions)	Per discharge	Per covered day of care	Per enrollee	
Race: ³											
White.....	26,855	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All other.....	3,114	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Census region:											
Northeast.....	6,818	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
North central.....	7,648	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
South.....	10,302	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
West.....	5,571	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

¹ As of July 1.

² Preliminary. Final data are estimated to be about 3 percent higher than the amounts shown for 1988.

³ Excludes unknown race.

NA—Not available.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy.

1984	6,183	2,884	9	3.1	314	35	.1	15	1,675	5	47
1985	6,725	2,907	10	3.5	305	30	.1	17	1,881	6	57
1986	7,065	2,959	10	3.5	295	29	.1	19	1,872	6	65
1987	7,148	3,031	10	3.3	272	27	.1	21	2,154	7	79
1988	7,683	3,101	13	4.2	401	31	.1	33	2,529	11	81
1989	8,688	3,171	23	7.4	1,437	61	.5	143	6,107	45	100
1990	9,008	3,255	23	7.0	1,022	44	.3	85	3,702	26	83
Annual percentage change in period:											
1974-80	4.8	7.4	1.2	-5.8	2.4	1.2	-4.7	10.3	9.0	2.7	7.7
1980-85	5.5	-4	3.9	4.3	-9	-4.6	-5	5.3	1.4	5.7	6.3
1985-90	6.0	2.3	17.4	14.6	27.4	8.5	24.5	37.5	17.1	34.3	7.9
Age:											
Under 35 years	.....	483	2	3.2	NA	NA	NA	7	4,584	15	NA
35 to 44 years	.....	655	3	4.2	NA	NA	NA	12	4,287	18	NA
45 to 54 years	.....	741	5	6.2	NA	NA	NA	17	3,700	23	NA
55 to 59 years	.....	554	5	8.3	NA	NA	NA	16	3,534	30	NA
60 to 64 years	.....	822	9	11.4	NA	NA	NA	32	3,471	40	NA
Sex:											
Male	.....	2,043	13	6.2	NA	NA	NA	46	3,659	23	NA
Female	.....	1,212	10	8.4	NA	NA	NA	38	3,755	32	NA
Race:											
White	.....	2,481	18	7.3	NA	NA	NA	64	3,507	26	NA
All other	.....	712	4	6.0	NA	NA	NA	19	4,524	27	NA
Census region:											
Northeast	.....	629	3	5.4	198	66	.3	13	3,754	20	65
North Central	.....	772	7	9.3	327	45	.4	24	3,339	31	73
South	.....	1,210	7	5.6	301	44	.2	24	3,572	20	81
West	.....	536	5	10.0	195	39	.4	23	4,334	43	119

¹ Number serving either aged or disabled Medicare enrollees, as of January 1991.

² As of July 1.

³ Earliest year for SNF utilization data.

⁴ First full year of disability coverage under Medicare.

⁵ Excludes unknown race.

⁶ Regions exclude residence unknown and territories.

NA—Not available.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, unpublished data.

TABLE 36.—SELECTED UTILIZATION AND REIMBURSEMENT DATA FOR END-STAGE RENAL DISEASE, AND KIDNEY TRANSPLANT PROGRAMS, FOR SELECTED CALENDAR YEARS

Program and key program variables	1975	1983	1984	1985	1986	1987	1988	1989	1990
End-stage renal disease program: ¹									
Beneficiaries:									
Number	12,702	34,864	37,973	41,354	45,075	49,258	54,117	60,006	67,078
Percentage change ²		13.5	8.9	8.9	9.0	9.3	9.9	10.9	11.8
Expenditures:									
Total (in millions)	\$206	\$850	\$1,025	\$1,129	\$1,257	\$1,332	\$1,475	\$1,712	\$1,942
Percentage change ²		19.4	20.6	10.2	11.3	6.0	10.7	16.1	13.4
Expenditure per beneficiary:									
Amount (in dollars) ³	\$16,185	\$24,377	\$26,984	\$27,307	\$27,884	\$27,041	\$27,252	\$28,531	\$28,945
Percentage change ²		5.3	10.7	1.2	2.1	-3.0	0.8	4.7	1.5
New beneficiaries during year:									
Number	6,763	6,738	7,532	9,372	14,696	15,570	17,416	19,340	19,913
Percentage change ²		0.0	11.8	24.4	56.8	5.9	11.9	11.0	3.0

Kidney transplant program: ⁴

Total transplants:

Number of patients ⁵	3,730	6,112	6,968	7,695	8,976	8,967	8,932	8,899	9,796
Percentage change ²		14.1	14.0	10.4	16.6	-0.1	-0.4	-0.4	10.1
Kidney transplanted from living donors: ⁶									
Number	NA	1,784	1,704	1,876	1,887	1,907	1,816	1,893	2,091
Percentage of total transplants		31.9	27.0	26.5	22.9	23.0	-4.8	4.2	21.3
Number of beneficiaries losing entitlement because of 3-year limitation	NA	NA	NA	NA	NA	NA	NA	NA	NA

¹ Persons entitled solely because of end-stage renal disease.² For intervals of more than 1 year, rate shown is average annual rate of change.³ Not adjusted for PPS pass-throughs.⁴ Transplants in Medicare-certified United States hospitals.⁵ Transplant count includes non-Medicare patients.⁶ Includes transplants to non-Medicare patients.

NA—Not available.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, unpublished data.

TABLE 37.—MEDICARE UTILIZATION AND REIMBURSEMENT: NUMBER OF AGED PERSONS SERVED UNDER HOSPITAL INSURANCE AND/OR SUPPLEMENTARY MEDICAL INSURANCE PER 1,000 ENROLLED, AMOUNT REIMBURSED PER PERSON SERVED, AND PERCENTAGE CHANGE, BY CENSUS DIVISION AND STATE, FOR SELECTED CALENDAR YEARS

	Persons served per 1,000 enrolled					Reimbursement per person served				
	Annual percent change					Annual percent change				
	1967	1985	1988	1989	1990	1967-90	1985-88	1988-89	1989-90	
Total, all areas ¹	366.5	722.1	767.8	784.9	801.6	\$592	\$2,762	\$3,177	\$3,445	\$3,578
United States ²	370.9	731.2	776.6	793.7	810.5	593	2,772	3,189	3,457	3,592
New England	380.4	767.4	788.6	815.3	829.0	680	2,708	3,046	3,405	3,573
Maine	330.1	756.1	848.2	857.1	866.8	586	2,369	2,605	2,756	2,744
New Hampshire	391.6	739.7	779.8	804.4	810.5	467	2,374	2,452	2,643	2,974
Vermont	411.7	742.8	815.9	819.4	841.0	515	1,990	2,410	2,586	2,659
Massachusetts	394.2	766.5	774.9	802.7	813.6	708	2,971	3,377	3,827	4,029
Rhode Island	375.4	829.6	754.9	838.7	853.6	625	2,619	2,548	3,162	3,236
Connecticut	390.9	764.1	800.8	817.2	838.1	711	2,570	3,055	3,327	3,511
Middle Atlantic	388.1	768.2	804.0	817.9	834.7	578	2,771	3,511	3,804	3,933
New York	406.9	765.7	797.0	810.9	830.4	610	2,533	3,581	3,962	4,119
New Jersey	399.0	759.8	788.4	806.9	826.7	526	2,650	3,363	3,324	3,483
Pennsylvania	365.0	776.4	821.8	833.0	844.7	533	3,147	3,502	3,869	3,948
East North Central	350.2	725.9	793.7	814.0	834.4	614	2,906	3,191	3,349	3,595
Ohio	353.6	718.4	808.2	825.7	846.3	585	2,792	3,205	3,264	3,824
Indiana	339.7	672.2	763.5	816.9	837.0	545	2,510	2,864	3,075	3,234
Illinois	339.2	693.4	748.1	762.7	788.1	703	3,313	3,429	3,423	3,760
Michigan	379.5	804.3	847.6	863.7	871.4	532	2,991	3,373	3,747	3,749
Wisconsin	354.7	736.9	803.3	813.1	843.2	639	2,527	2,684	2,959	2,877
West North Central	363.2	693.4	746.0	767.9	797.7	558	2,627	2,685	2,917	3,108
Minnesota	389.0	624.8	601.8	622.9	682.5	601	2,447	2,555	3,000	3,101
Iowa	365.9	715.3	822.3	831.9	850.6	505	2,282	2,413	2,620	2,753
Missouri	364.8	712.0	775.8	797.2	816.6	544	3,118	3,091	3,251	3,514
North Dakota	441.2	730.7	823.3	834.1	853.4	492	2,466	2,692	2,685	2,949
South Dakota	358.0	694.2	803.9	807.3	815.1	514	2,281	2,323	2,606	2,714
Nebraska	352.5	634.2	746.1	781.4	808.8	540	2,449	2,363	2,482	2,719
Kansas	365.3	765.4	780.7	821.1	850.0	540	2,553	2,680	2,941	3,144

South Atlantic.....	350.5	740.4	793.3	813.3	827.7	3.8	2.3	2.5	1.8	554	2,531	3,073	3,312	3,438	8.3	6.7	7.8	7.8
Delaware.....	368.2	770.9	814.2	829.2	843.6	3.7	1.8	1.8	1.7	552	2,612	2,975	3,374	3,526	8.4	4.4	13.4	13.4
Maryland.....	349.4	751.6	814.0	829.3	838.3	3.9	2.4	1.9	1.1	564	2,975	3,768	4,096	4,190	9.1	8.2	8.7	8.7
District of Columbia.....	452.8	739.4	781.3	789.8	772.7	2.4	1.9	1.1	-2.2	570	3,774	5,229	5,112	5,019	9.9	11.5	-2.2	-2.2
Virginia.....	317.3	729.7	811.1	826.8	848.5	4.4	3.6	1.9	2.6	516	1,976	2,738	3,029	3,127	8.1	13.0	6.3	6.3
West Virginia.....	342.2	692.0	778.6	802.2	838.6	3.9	4.0	3.0	3.3	489	2,575	2,738	2,996	3,197	8.5	2.1	9.4	9.4
North Carolina.....	324.0	721.9	797.3	823.4	852.3	4.3	3.1	3.3	3.5	515	1,982	2,491	2,697	2,799	7.6	7.9	8.3	8.3
South Carolina.....	296.2	680.6	716.3	799.8	832.2	4.6	1.7	11.7	4.1	523	2,340	2,412	2,721	2,689	7.4	1.0	12.8	12.8
Georgia.....	320.2	743.5	803.1	821.7	843.8	4.3	2.6	2.3	2.7	474	2,479	2,999	3,327	3,456	9.0	6.6	10.9	10.9
Florida.....	420.9	759.1	794.0	803.3	805.8	2.9	1.5	1.2	0.3	588	2,773	3,289	3,517	3,709	8.3	5.9	6.9	6.9
East South Central.....	332.1	698.1	775.9	819.6	846.9	4.2	3.6	5.6	3.3	489	2,570	2,890	3,264	3,413	8.8	4.0	12.9	12.9
Kentucky.....	365.9	671.9	788.7	809.5	837.3	3.7	5.5	2.6	3.4	458	2,395	2,992	3,180	3,424	9.1	7.7	6.3	6.3
Tennessee.....	354.8	678.7	779.8	816.0	853.4	3.9	4.7	4.6	4.6	502	2,816	3,070	3,406	3,402	8.7	2.9	11.0	11.0
Alabama.....	322.7	743.8	748.4	836.9	848.9	4.3	0.2	11.8	1.4	490	2,502	2,613	3,247	3,596	9.1	1.5	24.3	24.3
Mississippi.....	283.2	699.9	793.8	813.4	845.1	4.9	4.3	2.5	3.9	471	2,480	2,823	3,138	3,122	8.6	4.4	11.2	11.2
West South Central.....	374.8	687.4	783.6	801.5	825.9	3.5	4.5	2.3	2.9	504	2,811	3,164	3,482	3,624	9.0	4.0	10.1	10.1
Arkansas.....	319.3	715.4	812.1	822.7	862.9	4.4	4.3	1.3	4.9	466	2,550	2,686	3,014	3,155	8.7	1.7	12.2	12.2
Louisiana.....	343.4	653.5	782.7	797.6	821.1	3.9	6.2	1.9	2.9	446	3,167	3,613	4,028	4,368	10.4	4.5	11.5	11.5
Oklahoma.....	416.1	677.8	784.0	817.0	878.3	3.3	5.0	4.2	7.5	486	2,482	2,983	3,106	3,127	8.4	6.3	4.2	4.2
Texas.....	393.7	693.2	777.7	794.3	805.1	3.2	3.9	2.1	1.4	522	2,860	3,188	3,528	3,652	8.8	3.7	10.7	10.7
Mountain.....	417.1	716.6	744.0	752.0	772.7	2.7	1.3	1.1	2.8	560	2,637	2,955	3,255	3,292	8.0	3.9	10.2	10.2
Montana.....	416.5	679.7	755.7	780.6	823.5	3.0	3.6	3.3	5.5	505	2,348	2,777	3,019	3,000	8.1	5.8	8.7	8.7
Idaho.....	408.8	714.5	800.5	805.4	862.5	3.3	3.9	0.6	7.1	467	2,384	2,471	2,620	2,556	7.7	1.2	6.0	6.0
Wyoming.....	395.0	681.7	767.2	768.4	782.7	3.0	4.0	0.2	1.9	432	2,804	2,950	3,350	3,182	9.1	1.7	13.6	13.6
Colorado.....	475.4	704.0	700.7	703.9	740.8	1.9	-0.2	0.5	5.2	578	2,521	2,852	3,141	3,223	7.8	4.2	10.1	10.1
New Mexico.....	371.6	689.8	723.8	736.0	736.4	2.9	1.6	1.7	0.1	513	2,462	2,738	3,070	3,154	8.2	3.6	12.1	12.1
Arizona.....	431.7	758.1	764.6	766.3	774.3	2.6	774.3	0.3	0.2	612	2,896	3,197	3,568	3,692	8.1	3.4	11.6	11.6
Utah.....	346.0	713.1	779.5	799.4	808.2	3.8	3.0	2.6	1.1	580	2,225	2,635	2,892	2,799	7.1	5.8	9.7	9.7
Nevada.....	414.9	688.9	687.5	705.4	721.2	2.4	-0.1	2.6	2.2	532	3,243	3,752	3,964	3,903	9.1	5.0	5.6	5.6
Pacific.....	468.9	739.7	720.9	718.1	713.8	1.8	-0.9	-0.4	-0.6	630	6,153	3,540	3,873	3,853	8.2	-16.8	9.4	9.4
Washington.....	433.0	731.1	772.5	762.6	760.8	2.5	1.9	-1.3	-0.2	507	2,522	2,815	2,998	3,218	8.4	3.7	6.5	6.5
Oregon.....	392.6	716.2	696.3	707.0	707.8	2.6	-0.9	1.5	0.1	583	2,459	2,452	2,829	2,833	7.1	-0.1	15.4	15.4
California.....	490.7	745.7	719.7	716.3	710.3	1.6	-1.2	-0.5	-0.8	653	3,379	3,843	4,209	4,138	8.4	4.4	9.5	9.5
Alaska.....	307.2	678.4	726.1	765.2	759.0	4.0	2.3	5.4	-0.8	376	3,554	3,773	4,122	4,007	10.8	2.0	9.3	9.3
Hawaii.....	407.4	709.3	581.4	579.1	589.9	1.6	-6.4	-0.4	1.9	572	2,334	2,759	2,930	3,095	7.6	5.7	6.2	6.2

¹ Consists of United States, Puerto Rico, Virgin Islands, and other outlying areas.

² Consists of 50 States, District of Columbia, and residence unknown.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, "Annual Medicare Program Statistics," and unpublished data.

TABLE 38.—NUMBER OF PLANS AND PERSONS ENROLLED IN MEDICARE—CONTRACTING PREPAID HEALTH PLANS: DATE AS OF DECEMBER 1, 1992

Current contract summary	Number of Plans	Enrollees
Total prepaid contracts	177	2,357,060
Risk.....	95	1,565,659
Cost.....	26	136,550
Demos (SHMO's).....	4	21,852
HCPPs	52	632,999
Percent of total Medicare beneficiaries		6.5

TEFRA Risk: Contracts with a Health Maintenance Organization (HMO) under authority of section 1876 of the Social Security Act, as amended by the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA).

Old risk: Contracts under authority of section 1876, as it existed prior to TEFRA. HMO assumes full risk for costs of services to enrolled beneficiaries.

Cost basis: Contracts under authority of section 1876, but services rendered by HMO are reimbursed on a cost basis; HMO assumes no risk.

Demo: Projects operated on a demonstration basis. Current demonstration contracts are limited to Social Health Maintenance Organizations (SHMOs).

HCPPs, GPPPs: Health Care Payment Plans and Group PrePayment Plans contracts under authority of section 1833. HCPPs and GPPPs involve only part B services, and are reimbursed at 80 percent of reasonable cost.

Source: Health Care Financing Administration.

APPENDIX B. HEALTH STATUS, INSURANCE, AND EXPENDITURES OF THE ELDERLY, AND BACKGROUND DATA ON LONG-TERM CARE

Although the health status of the elderly appears to have been improving in recent decades, many elderly persons have conditions that require medical and long-term health care, sometimes in substantial amounts. Nearly all elderly persons have some insurance that protects them, at least partially, from the expenses arising from health care use. Many are well insured for their acute care needs—that is, for hospital and physician services. Others face greater risk of high out-of-pocket expenditures. This appendix reports on the health status, health insurance, and health care expenditures of the elderly.

HEALTH STATUS

By various measures, the health status of the elderly population has been improving over the years. For example, life expectancy at age 65 has increased from 13.9 years in 1950 to 17.2 years in 1989 (see table 1). The improvements in life expectancy—or, alternatively, the declines in mortality rates—have been greater for females than for males. Morbidity indicators—such as the incidence of high blood pressure—also improved among those aged 65 to 74 years between the early 1960's and the late 1970's (see table 2).

TABLE 1.—LIFE EXPECTANCY AT BIRTH AND AT 65 YEARS OF AGE, BY SEX, BY RACE,
UNITED STATES, SELECTED YEARS 1900–90

[Remaining life expectancy in years]

Year	At birth			At 65 years			At birth	
	Both sexes	Male	Female	Both sexes	Male	Female	White	Black
1900 ^{1 2}	47.3	46.3	48.3	11.9	11.5	12.2	47.6 ³	33.0
1950 ²	68.2	65.6	71.1	13.9	12.8	15.0	69.1	60.7
1960 ²	69.7	66.6	73.1	14.3	12.8	15.8	70.6	63.2
1970	70.9	67.1	74.8	15.2	13.1	17.0	71.7	64.1
1980	73.7	70.0	77.4	16.4	14.1	18.3	74.4	68.1
1984	74.7	71.2	78.2	16.8	14.6	18.6	75.3	69.7
1985	74.7	71.2	78.2	16.7	14.6	18.6	75.3	69.5
1986	74.8	71.3	78.3	16.8	14.7	18.6	75.4	69.4
1987	75.0	71.5	78.4	16.9	14.8	18.7	75.6	69.4
1988	74.9	71.5	78.3	16.9	14.9	18.6	75.6	69.2
1989	75.3	71.8	78.6	17.2	15.2	18.8	76.0	69.2
Provisional data:								
1988 ²	74.9	71.4	78.3	16.9	14.8	18.6	75.5	69.5
1989 ²	75.2	71.8	78.5	17.2	15.2	18.8	75.9	69.7
1990 ²	75.4	72.0	78.8	17.3	15.3	19.0	76.0	70.3

¹ Death registration area only; includes 10 States and the District of Columbia.² Includes deaths of nonresidents of the United States.³ Figure is for the all other population.

Source: National Center for Health Statistics, Health, United States, 1989, Hyattsville, Maryland: Public Health Service, 1990.

TABLE 2.—SELECTED HEALTH STATUS INDICATORS FOR PERSONS 65-74 YEARS OF AGE, BY SEX, 1960-62, 1971-74, AND 1976-80

[Percent of population]

Health status indicator	Both sexes			Male			Female		
	1960-62	1971-74	1976-80	1960-62	1971-74	1976-80	1960-62	1971-74	1976-80
Borderline or definite elevated blood pressure ¹	73.8	70.3	63.1	65.9	65.4	62.0	80.3	74.1	63.9
Definite elevated blood pressure ²	48.7	40.9	34.5	40.5	36.4	33.3	55.4	44.4	35.5
High-risk serum cholesterol levels ³	37.3	31.3	27.2	20.8	19.9	18.1	50.8	40.0	34.3
Overweight ⁴	34.6	31.5	32.7	23.8	23.0	25.2	43.3	38.0	38.5

¹ Borderline or definite elevated blood pressure is defined as either systolic pressure of at least 140 mmHg or diastolic pressure of at least 90 mmHg or both based on a single measurement.

² Definite elevated blood pressure is defined as either systolic pressure of at least 160 mmHg or diastolic pressure of at least 95 mmHg or both based on a single measurement.

³ High-risk serum cholesterol levels are defined by age-specific cut points of the cholesterol distribution. For 40 years of age and over, high risk is greater than 260 milligrams/deciliter. Risk levels defined by NIH Consensus Development conference statement on lowering blood cholesterol, December 10, 1984.

⁴ Overweight is defined for men as body mass index greater than or equal to 27.8 kilograms/meter², and for women as body mass index greater than or equal to 27.3 kilograms/meter². These cut points were used because they represent the sex-specific 85th percentiles for persons 20-29 years of age in the 1976-80 National Health and Nutrition Examination Survey.

Source: National Center for Health Statistics, Health, United States, 1985, DHHS Pub. No. (PHS) 86-1232, pp. 76-79. Data are based on physical examinations of a sample of the civilian, noninstitutionalized population.

Despite the trend toward improved health status of the elderly, their needs for medical and long-term care services remain substantial. First, greater life expectancy postpones the probable need for terminal illness care. (About two-thirds of the deaths in the United States are of the elderly. A recent study found that the 6 percent of Medicare beneficiaries who died in 1978 accounted for 28 percent of Medicare expenditures.¹) Second, many of the elderly have one or more chronic conditions, many of which give rise to the need for continuing health care. Table 3 shows the incidence of several common chronic conditions among the elderly. Nearly half report having arthritis, about 40 percent report high blood pressure, and almost 30 percent report heart disease. The incidence of many chronic conditions is directly related to age and inversely related to family income.

Self-assessed health is a common method used to measure health status, with responses ranging from "excellent" to "poor." Nearly 71 percent of elderly people living in the community describe their health as excellent, very good, or good, compared with others their age; only 29 percent report that their health is fair or good (see table 4).

Income is directly related to one's perception of his or her health. About 26 percent of older people with incomes over \$35,000 described their health as excellent compared to others their age, while only 10 percent of those with low incomes (less than \$10,000) reported excellent health.

TABLE 3.—SELECTED CHRONIC CONDITIONS PER 1,000 ELDERLY PERSONS, BY AGE AND FAMILY INCOME, 1988

Chronic condition	All elderly	Age		Family income			
		65-74	75 and over	Less than \$10,000	\$10,000 to \$19,999	\$20,000 to \$34,999	\$35,000 and over
Arthritis	486	445	550	608	452	471	397
Cataracts	168	118	246	183	174	131	150
Hearing impairment	315	274	381	308	364	259	314
Deformity or orthopedic impairment	161	151	177	182	179	136	140
Hernia of abdominal cavity	58	54	64	72	67	46	51
Diabetes	92	95	88	98	101	76	71
Heart disease	296	272	334	346	324	269	257
High blood pressure	373	373	374	472	396	345	321
Emphysema	38	36	41	52	48	34	(¹)

¹ Sample size is too small for reliable estimate.

Source: U.S. Department of Health and Human Services, National Center for Health Statistics, Vital and Health Statistics: Current estimates from the National Health Interview Survey, 1988, Series 10, No. 173, October 1989.

¹ J. Lubitz and R. Prihoda, "The Use and Costs of Medicare Services in the Last Two Years of Life," Health Care Financing Review, Volume 5, 1984, pp. 117-131.

TABLE 4.—SELF-ASSESSED HEALTH STATUS OF THE ELDERLY, BY FAMILY INCOME, 1989

[In percent]

Characteristic	All persons ¹ (thousands)	All health status ³	Self-assessed health status ²				
			Excellent	Very good	Good	Fair	Poor
All persons 65 ⁴	29,219	100.0	16.4	23.1	31.9	19.3	9.2
Sex:							
Men.....	12,143	100.0	16.9	23.2	30.8	18.4	10.7
Women.....	17,076	100.0	16.1	23.0	32.8	20.0	8.1
Family income:							
Under \$10,000.....	5,612	100.0	10.3	19.4	29.7	25.0	15.6
\$10,000 to \$19,999.....	8,002	100.0	14.8	21.7	33.9	21.1	8.5
\$20,000 to \$34,999.....	5,242	100.0	20.2	25.7	32.5	15.7	5.9
\$35,000 and over.....	3,484	100.0	26.0	26.8	30.3	11.7	5.1

¹ Includes unknown health status.² Excludes unknown health status.³ The categories related to this concept result from asking the respondent, "Would you say—health is excellent, very good, good, fair, or poor?" As such, it is based on the respondent's opinion and not directly on any clinical evidence.⁴ Includes unknown family income.

Note.—Percentages may not add to 100 percent due to rounding.

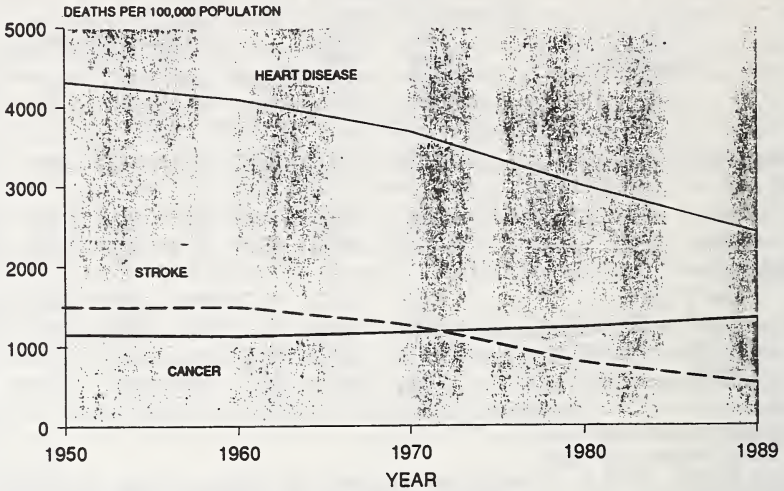
Source: National Center for Health Statistics. "Current Estimates from the National Health Interview Survey, 1989." Vital and Health Statistics Series 10, No. 176 (October 1990). Data are based on household interviews of the civilian, noninstitutionalized population.

CAUSES OF DEATH FOR THE ELDERLY ²

In the United States, about 7 out of every 10 elderly persons die from heart disease, cancer, or stroke. Heart disease was the major cause of death in 1950, and remains so today even though there have been rapid declines in death rates from heart disease since 1968, especially among females. Death rates from cancer continue to rise in comparison to heart disease, especially deaths caused by lung cancer (chart 1). In 1988, however, heart disease accounted for 40 percent of all deaths among persons 65+, while cancer accounted for 21 percent of all deaths in this age group.³ Even if cancer were eliminated as a cause of death, the average life span would be extended by less than 2 years because of the prevalence of heart disease. Eliminating deaths due to heart disease, on the other hand, would add an average of 5 years to life expectancy at age 65, and would lead to a sharp increase in the proportion of older persons in the total population.⁴

² This entire section is from *Aging America: Trends and Projections*, 1987-88 edition.³ National Center for Health Statistics. "Annual Summary of Births, Marriages, Divorces, and Deaths: United States, 1985." *Monthly Vital Statistics Report* Vol. 34, No. 13 (September 1986).⁴ National Center for Health Statistics. "United States Life Tables Eliminating Certain Causes of Death." *U.S. Decennial Life Tables for 1979-1981 Vol. 1, No. 2* (forthcoming).

CHART 1. DEATH RATES FOR LEADING CAUSES OF DEATH FOR PEOPLE AGE 75-84: 1950-85



SOURCES: National Center for Health Statistics. *Health, United States, 1989*. DHHS Pub. No. (PHS)90-1232, Washington: Department of Health and Human Services (March 1990).

National Center for Health Statistics. "Annual Summary of Births, Marriages, Divorces, and Deaths: United States, 1989." *Monthly Vital Statistics Report* Vol. 38, No. 13 (August 30, 1990).

National Center for Health Statistics. "Advance Report of Final Mortality Statistics, 1988." *Monthly Vital Statistics Report* Vol. 39, No. 7, Supplement (November 28, 1990).

The third leading cause of death among the elderly—stroke (cerebrovascular disease)—has been decreasing over the past 30 years. Reasons for this dramatic decline are not fully understood. Part of the decline may be attributable to better control of hypertension. Better diagnosis and improved management and rehabilitation of stroke victims may also be related factors.⁵ In 1988, cerebrovascular disease accounted for only 8 percent of all deaths in the 65+ age group.

Table 5 shows the 10 leading causes of death for three subgroups of the older population.

The factors which have led to reductions in mortality may or may not also lead to overall improvements in health status. If Americans continue to live only to about age 85, control of life-threatening disease could produce a healthier older population. But, if the life-span is increased dramatically in future years beyond age 85, the onset of illness may only be delayed, without an actual shortening of the period of illness.

⁵ National Center for Health Statistics. *Health, United States, 1985*. DHHS Pub. No. (PHS) 86-1232, Washington: Department of Health and Human Services, December 1985.

TABLE 5.—DEATH RATES FOR TEN LEADING CAUSES OF DEATH AMONG OLDER PEOPLE, BY AGE: 1988

[Rates per 100,000 population in age group]

Cause of death	65+	65-74	75-84	85+
All causes.....	5,105	2,730	6,321	15,594
Diseases of the heart	2,066	984	2,543	7,098
Malignant neoplasms.....	1,068	843	1,313	1,639
Cerebrovascular diseases.....	431	155	554	1,707
Chronic obstructive pulmonary diseases.....	226	152	313	394
Pneumonia and influenza.....	225	60	257	1,125
Diabetes.....	97	62	125	222
Accidents.....	89	50	107	267
Atherosclerosis.....	69	15	70	396
Nephritis, nephrotic syndrome, nephrosis.....	61	26	78	217
Septicemia.....	56	24	71	199
All other causes.....	717	359	890	2,330

Source: National Center for Health Statistics. "Advanced Report of Final Mortality Statistics, 1988." Monthly Vital Statistics Report Vol. 39, No. 7, Supplement (November 28, 1990).

MEDICARE REIMBURSEMENT AND OUT-OF-POCKET LIABILITIES OF THE ELDERLY

Tables 6 through 8 illustrate for 4 selected years how Medicare reimbursement, acute health care costs, and out-of-pocket liabilities of Medicare enrollees have changed. The years chosen are 1975, 1980, 1985, 1990 and 1995 (projected values). Constant 1990 dollar values were obtained using the CPI-U.

The fastest-growing component of Medicare reimbursement is for benefits under the Supplementary Medical Insurance (SMI) program. For SMI, reimbursements increase at an annual rate of 13.3 percent, while the growth in total costs (including enrollees' share of costs) is 12.2 percent (see table 6). As a result, the share of SMI costs reimbursed by Medicare increases significantly over the period—from about 64 percent in 1975 to about 74 percent by 1990. Through 1985, the growth in Medicare's share is due to the declining significance of the SMI deductible, so that more enrollees' costs were eligible for reimbursement.

In the Hospital Insurance (HI) program, by contrast, the rate of growth in reimbursement is slower than the growth in enrollee's copayment costs. Consequently, the share of HI costs reimbursed by Medicare has decreased from 93 percent in 1975 to 91 percent in 1990.

Overall, the share of costs reimbursed by Medicare has increased slightly. The percentage of costs paid by Medicare for services covered under Medicare was 82.2 percent in 1975 and 83.4 percent in 1990 (see table 6). The other side of this—the share of costs paid directly by enrollees—is shown in the third panel of table 7. Total direct costs plus Medicare reimbursement equals the total or 100 percent.

TABLE 6.—REIMBURSEMENTS AND OUT-OF-POCKET COSTS UNDER MEDICARE, SELECTED CALENDAR YEARS

[Incurred costs per HI or SMI enrollee]

	1975	1980	1985	1990	1995	Annual growth 1975-95 (per- cent)
In current dollars						
Hospital insurance:						
Reimbursement.....	\$458	\$906	\$1,539	\$1,959	\$3,005	9.9
Copayments.....	34	66	117	188	257	10.7
Total	492	972	1,656	2,146	3,262	9.9
Supplementary medical insurance:						
Reimbursement.....	184	402	763	1,298	2,220	13.3
Copayments.....	83	138	246	394	601	10.4
Balance-billing.....	22	56	87	68	49	4.1
Total	289	597	1,096	1,760	2,870	12.2
Total Medicare reimbursement.....	642	1,308	2,302	3,257	5,225	11.0
Total costs under Medicare.....	781	1,569	2,752	3,906	6,132	10.9
In constant 1990 dollars						
Hospital insurance:						
Reimbursement.....	1,065	1,439	1,870	1,959	2,575	4.5
Copayments.....	79	104	143	188	220	5.3
Total	1,144	1,543	2,012	2,146	2,795	4.6
Supplementary medical insurance:						
Reimbursement.....	428	639	927	1,298	1,902	7.7
Copayments.....	193	220	299	394	515	5.0
Balance-billing.....	51	89	106	68	42	-1.0
Total	672	947	1,332	1,760	2,459	6.7
Total Medicare reimbursement.....	1,493	2,077	2,797	3,257	4,477	5.6
Total costs under Medicare.....	1,816	2,490	3,344	3,906	5,255	5.5
Percent of costs paid by Medicare....	82.2	83.4	83.6	83.4	85.2	0.2

Note.—1995 values are projected. The CPI-U was used to obtain constant dollars.

Source: Congressional Budget Office (February 1993 baseline).

TABLE 7.—ENROLLEE COSTS UNDER MEDICARE, SELECTED CALENDAR YEARS

[Incurred costs per HI or SMI enrollee]

	1975	1980	1985	1990	1995	Annual growth 1975-95 (per- cent)
In current dollars						
HI copayments	\$34	\$66	\$117	\$188	\$257	10.7
SMI copayments	83	138	246	394	601	10.4
Balance-billing	22	56	87	68	49	4.1
Total direct costs	139	260	451	649	907	9.8
Premium costs	80	110	186	343	553	10.1
Total enrollee costs	219	371	637	993	1,460	9.9
Enrollee per capita income ¹	5,158	8,431	12,767	15,454	19,141	6.8
In constant 1990 dollars						
HI copayments	79	104	143	188	220	5.3
SMI copayments	193	220	299	394	515	5.0
Balance-billing	51	89	106	68	42	-1.0
Total direct costs	323	413	547	649	777	4.5
Premium costs	187	175	226	343	474	4.8
Total enrollee costs	510	588	773	993	1,251	4.6
Enrollee per capita income ¹	11,998	13,386	15,513	15,454	16,402	1.6
Percent of costs under Medicare paid by enrollees, by source of payment						
HI copayments	4.3	4.2	4.3	4.8	4.2	.....
SMI copayments	10.6	8.8	8.9	10.1	9.8	.....
Balance-billing	2.8	3.6	3.2	1.7	.8	.....
Total direct costs	17.8	16.6	16.4	16.6	14.8	.....
Premium costs	10.3	7.0	6.8	8.8	9.0	.....
Total	28.1	23.6	23.1	25.4	23.8	.....
Enrollee-paid costs as a percent of enrollee per capita income ¹	4.3	4.4	5.0	6.4	7.6	.....

¹ From Current Population Survey, adjusted for underreporting.

Note.—1995 values are projected. The CPI-U was used to obtain constant dollars.

Source: Congressional Budget Office (February 1993 baseline).

In constant dollars, HI copayments have increased the most rapidly between 1975 and 1995. However, between 1990 and 1995, premium costs are expected to rise the most rapidly due equally to co-

payments and premiums. In contrast, the cost to the enrollee from balance-billing has decreased significantly since 1985—a direct policy result of the participating physician program and the imposition of lower limits on balance billing. See table 8 for deductible amounts and monthly premium amounts under Medicare.

Enrollees are spending an increasing share of their income for health care. In 1975, about 4.3 percent of enrollees' per capita income went to cover their share of acute health care costs under Medicare. By 1995, enrollees will have to pay an estimated 7.6 percent of their per capita income to cover their share of costs under Medicare.

Total health spending as a percent of after-tax income increased substantially between 1972 and 1988 for the elderly. In 1972, among aged households out-of-pocket health spending represented 7.8 percent of after-tax income. By 1988, out-of-pocket health spending had increased to 12.5 percent of after-tax income. Chart 2 illustrates out-of-pocket spending for health as a percentage of gross income for the elderly and nonelderly for years 1984 through 1991. While out-of-pocket costs as a percentage of income have been relatively stable during this period for nonaged households, these costs have increased slightly as a percentage of income for aged households.

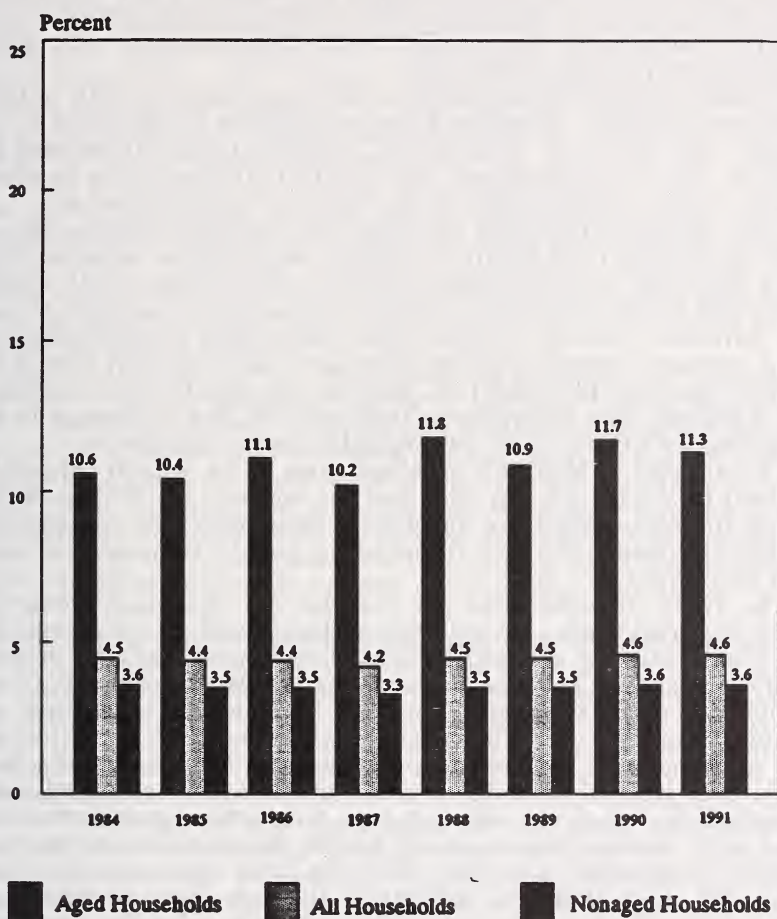
TABLE 8.—COPAYMENT AND PREMIUM VALUES UNDER MEDICARE, SELECTED CALENDAR YEARS

	1975	1980	1985	1990	1995	Annual growth 1975-95 (in percent)
In current dollars						
Hospital insurance:						
Hospital deductible	\$92	\$180	\$400	\$592	\$752	11.1
Supplementary medical insurance:						
Annual deductible	60	60	75	75	100	2.6
Monthly premium ¹	6.70	9.20	15.50	28.60	46.10	10.1
In constant 1990 dollars						
Hospital insurance:						
Hospital deductible	214	286	486	592	644	5.7
Supplementary medical insurance:						
Annual deductible	139	95	91	75	86	-2.4
Monthly premium ¹	15.57	14.61	18.83	28.60	39.50	4.8

¹ The 1980 SMI monthly premium amount is the average of values for the first and second halves of the year.

Source: Congressional Budget Office (February 1993 baseline).

CHART 2. DIRECT OUT-OF-POCKET SPENDING FOR HEALTH AS A PERCENTAGE OF GROSS INCOME BY AGED HOUSEHOLDS HEADED BY A PERSON AGED 65 OR OVER, ALL HOUSEHOLDS AND NONAGED HOUSEHOLDS HEADED BY A PERSON UNDER AGE 65, 1984-91



SOURCE: Congressional Budget Office calculations using data from the Consumer Expenditure Surveys of the Bureau of Labor Statistics, 1985-92.

NOTES: Data are tabulated by age of reference person. Aged households are those in which the reference person is age 65 or over. Such households may include some individuals under age 65. Nonaged households are those in which the reference person is under age 65.

The decline in direct out-of-pocket spending as a share of after-tax income for aged households between 1988 and 1989 may be due, in part, to the Medicare Catastrophic Coverage Act of 1988 which was partially in place in 1989, but repealed subsequently.

ANALYZING TRENDS IN MEDICARE SPENDING, 1967-1998 ⁶

Between 1980 and 1985, total Medicare spending for hospital inpatient services grew at an annual rate of 14.6 percent. The estimated growth rate for 1985 to 1991 is 5.1 percent. The difference in these rates is due to changes in four separate trends: Medicare enrollment, admissions per enrollee, real expenditures per admission, and the general rate of inflation.

Reduced inflation contributes to the lower rate of growth in total Medicare inpatient spending. General inflation is estimated at 4.1 percent per year from 1985 to 1991, compared with 5.6 percent for 1980 to 1985. The growth rate for 1985 to 1991 would thus be about 1.5 percentage points higher at the previous rate of inflation.

Real Medicare inpatient spending per enrollee removes the effects of changes in Medicare enrollment and general inflation from total Medicare inpatient spending (see table 9). Since both enrollment and prices are almost always increasing, the growth of real per enrollee spending is slower than the growth of total spending. Real inpatient spending per enrollee grew at an annual rate of 6.4 percent between 1980 and 1985, and the estimate for 1985 to 1990 is -0.3 percent. The difference in these rates is due to changes in admissions per enrollee and real expenditures per admission.

The number of Medicare enrollees grew at an annual rate of 1.7 percent between 1980 and 1985, and the estimate for 1985 to 1991 is about the same. Medicare enrollment thus makes no contribution to the observed difference in spending growth between the early and late 1980's.

The trend in admissions per enrollee did change, however. In 1984, Medicare's peer review organizations were set up to monitor inpatient cases for appropriateness of treatment and site of care. Simultaneously, admission rates among the Medicare population—which had been increasing through 1983—began to decline. Although admission rates inched up again after 1987, rates in 1989 for people age 65 or more (a proxy for the Medicare population) were still only 85 percent of rates in 1983. Perhaps Medicare's preadmission approval requirements for certain procedures, coupled with retrospective payment denials for care deemed inappropriate, encouraged physicians either to forgo some elective procedures for their Medicare patients or to move them to the outpatient sector. It should be noted that admissions for the non-Medicare population decreased for each year since 1981. Given this trend, some credit for lower admissions rates must go to changes in practice patterns and other factors not associated with Medicare policy.

A reduction in real expenditures per admission makes the greatest contribution to decreased spending growth. This decline is primarily due to smaller increases in payment rates under PPS since the very large increases in the first 2 years (1984 and 1985). At the previous rate of increase in Medicare expenditures per admission, the estimated growth in total inpatient spending between 1985 and 1991 would be 12.0 percent per year, rather than 5.1 percent. The

⁶ The following section borrows heavily from a memorandum prepared by Sandra Christensen, of the Congressional Budget Office, February 4, 1991. Updated April 1992.

estimated real growth in spending per enrollee would have been 6.4 percent per year, rather than -0.3 percent.

Costs in hospital outpatient departments have dropped relative to the previous trend, indicating that hospital inpatient costs have not simply been shifted to the outpatient sector. Savings relative to trend for hospital outpatient and home health services may in large part reflect unsustainably large rates of growth during the trend period from 1975 through 1980. Introduction of a new payment methodology (a blend of a fixed rate and the hospital's costs) for certain surgical procedures performed in outpatient departments tended to reduce costs somewhat, but this effect was partially offset by the shift of services from the inpatient sector. During the 1980s, Medicare's administrative agents implemented stricter standards for determining coverage of home health services (tending to reduce costs), but increased demand for services from patients discharged earlier from hospitals than they would have been prior to the prospective payment system would have worked to increase Medicare's spending for home health.

Growth in spending for physicians' services has not slowed as much as hospital spending relative to previous trends despite the disproportionate impact on physicians of budget reconciliation bills. Apparently, growth in the volume of physicians' services has accelerated by enough to offset some of the enacted reductions in payment rates. Although not all of this growth was in response to fee cuts, growth in the volume of services was enough to completely offset the fee freeze in place from 1984 through 1986, but was insufficient to offset entirely the effects of subsequent fee cuts for "overvalued" procedures.

Spending for skilled nursing facilities (SNFs) increased significantly. During the period from 1975 through 1980, real spending per enrollee for SNFs was falling. This trend was reversed during the 1980s. In 1988, growth in SNF spending accelerated sharply because of a revision in the manual used by administrative agents to determine Medicare coverage that greatly relaxed the definition of covered care to make it conform with legislative language. Growth in SNF spending further accelerated in 1989 under provisions of the Medicare Catastrophic Coverage Act, which briefly eliminated the requirement for a hospital stay prior to a covered SNF stay and which reduced the copayments required of enrollees for SNF stays.

Table 9 shows Medicare spending per enrollee in constant 1990 dollars where the CPI-U has been used to obtain constant dollars. The first column includes both Medicare benefits and administration. All other columns include spending on benefits only.

From 1975 to 1985, total real spending per enrollee grew at an annual rate of 7.0 percent. From 1985 to 1990, there was a dramatic decline in the real growth rate in HI expenditures per capita due mostly to a drop in the inpatient hospital growth rate. This growth rate fell from 6.4 percent to -0.3 percent between the first 5 years of the 1980's and the subsequent years. While the outpatient growth rate increased slightly, the total real hospital spending growth rate declined from 6.5 percent annually to 0.7 percent between 1980 to 1985 as compared with 1985 to 1990. This decline in the hospital spending growth rate results in a 3.9 percentage point

reduction in the total Medicare spending growth rate—a decline of 56 percent.

If the total growth rate in Medicare spending had continued between 1985 and 1990 at the same 7.0 percent rate exhibited between 1980 and 1985, total Medicare costs per enrollee would be \$4,282 in 1991, or almost \$1,000 per enrollee more than the actual estimate. This would imply additional Medicare spending of about \$34 billion in that year.

TABLE 9.—REAL SPENDING PER ENROLLEE

[Fiscal years, in constant 1990 dollars]

Fiscal years	Medicare	HI	SMI	Hospital inpatient	Skilled nursing facility	Home health and hospice	Hospital outpatient	Physician and lab	Total hospital
Estimates by the Health Care Financing Administration									
1967	641	464	133	443	18	4	3	130	446
1968	960	660	260	591	61	10	8	250	599
1969	1,120	780	288	710	62	12	13	271	724
1970	1,138	756	324	700	47	13	16	303	717
1971	1,175	803	312	765	32	12	21	286	785
1972	1,247	854	327	824	24	12	26	297	849
1973	1,190	826	308	797	22	11	24	280	821
1974	1,257	856	326	824	23	16	35	283	859
1975	1,446	1,004	376	964	26	20	53	316	1,017
1976	1,584	1,084	425	1,038	27	30	66	348	1,104
1977	1,734	1,190	482	1,139	28	35	79	391	1,218
1978	1,855	1,271	514	1,218	26	39	90	411	1,308
1979	1,920	1,300	554	1,247	24	42	98	443	1,345
1980	2,028	1,367	598	1,314	22	45	106	478	1,420
1981	2,193	1,481	647	1,422	22	49	116	519	1,538
1982	2,390	1,616	713	1,540	22	58	138	572	1,678
1983	2,539	1,687	791	1,598	23	68	151	639	1,749
1984	2,633	1,736	832	1,637	22	78	151	680	1,788
1985	2,849	1,897	882	1,789	23	87	158	722	1,948
1986	2,899	1,859	974	1,751	22	87	191	782	1,942
1987	2,973	1,805	1,105	1,696	23	87	214	890	1,910
1988	3,016	1,773	1,176	1,667	24	83	226	948	1,892

TABLE 9.—REAL SPENDING PER ENROLLEE—Continued

[Fiscal years, in constant 1990 dollars]

Fiscal years	Medicare	HI	SMI	Hospital inpatient	Skilled nursing facility	Home health and hospice	Hospital outpatient	Physician and lab	Total hospital
Projections by the Congressional Budget Office									
1989.....	3,117	1,834	1,210	1,675	72	89	240	968	1,915
1990.....	3,312	1,965	1,277	1,763	83	121	257	1,017	2,021
1991.....	3,288	1,909	1,309	1,695	68	148	266	1,042	1,961
Projections by the Congressional Budget Office									
1992.....	3,569	2,136	1,356	1,830	98	211	291	1,063	2,121
1993.....	3,781	2,263	1,445	1,874	119	272	323	1,119	2,198
1994.....	4,120	2,425	1,622	1,963	137	328	364	1,255	2,327
1995.....	4,460	2,583	1,803	2,066	147	373	413	1,387	2,480
1996.....	4,787	2,741	1,973	2,184	153	407	470	1,500	2,654
1997.....	5,102	2,878	2,150	2,290	157	435	528	1,619	2,818
1998.....	5,401	2,984	2,343	2,369	161	459	590	1,749	2,958
Average annual growth rates (in percent)									
1975-80.....	7.0	6.4	9.7	6.4	-3.4	17.0	15.0	8.6	6.9
1980-85.....	7.0	6.8	8.1	6.4	0.3	14.3	8.3	8.6	6.5
1985-90.....	3.1	0.7	7.7	-3	29.7	6.7	10.2	7.1	.7
1990-95.....	6.1	5.6	7.1	3.2	12.2	25.3	9.9	6.4	4.2
1975-85.....	7.0	6.6	8.9	6.4	-1.6	15.6	11.6	8.6	6.7
1985-95.....	4.6	3.1	7.4	1.5	20.6	15.7	10.1	6.7	2.4

Note: Column 1 includes both benefits and administrative costs. All other columns include only benefit amounts. The CPI-U was used to obtain constant dollars.
Source: Congressional Budget Office (February 1993 baseline).

TOTAL HEALTH CARE EXPENDITURES FOR THE ELDERLY

Expenditures for personal health care services for the elderly nearly quadrupled between 1977 and 1987, rising from \$43 billion to an estimated \$162 billion (see table 10).

Government programs (Federal and State) account for two-thirds of estimated 1987 spending for the aged (see table 10). The most significant of these programs is Medicare which pays for nearly half of the aged's health bill. Medicaid funds about 12 percent of the expenditures.

Health insurance coverage of the elderly

Table 11 shows the sources of health insurance coverage for the noninstitutionalized population aged 65 and over in 1991. Over 95 percent of the aged population was enrolled in Medicare, and more than three-quarters of the Medicare enrollees had some form of supplemental coverage. Beneficiaries with incomes below the Federal poverty level were least likely to have supplemental coverage; those who had such coverage were more likely to rely on Medicaid. Higher income groups were more likely to obtain supplemental coverage through individually purchased medigap policies or through employer-based plans. Of those with incomes greater than 200 percent of the poverty level, 40.7 percent had employer coverage, compared to just 5.4 percent of those below poverty. (It should be noted that the Current Population Survey (CPS), on which table 11 is based, does not distinguish between primary and secondary sources of coverage. Some of the individuals reporting both Medicare and employer-based plans relied on the employer plan as their primary insurer, with Medicare functioning as a secondary payer.) About 4 percent of the elderly had more than one source of supplemental coverage, such as both employer and individual medigap coverage, or both medigap and Medicaid. This figure does not include individuals who obtained multiple policies from a single basic coverage source, such as those who purchased more than one private medigap policy. The number of such individuals cannot be determined from the CPS; however, according to an American Association of Retired Persons (AARP) 1989 survey, 24 percent of respondents in the national sample owning insurance in addition to Medicare, own two or more policies.

About 1.2 million elderly persons did not report Medicare coverage in 1991. Of these, 924,000 had coverage from some other source. An estimated 25 percent of these are Federal annuitants who are covered through the Federal Employees Health Benefits Program (this estimate is based on unpublished data from the Office of Personnel Management). Approximately 289,000 persons aged 65 or over were without health insurance coverage in 1991.

TABLE 10.—PERSONAL HEALTH CARE EXPENDITURES FOR PEOPLE 65 YEARS OF AGE OR OVER, BY SOURCE OF FUNDS AND TYPE OF SERVICE, 1977, 1984, AND 1987

[In millions of dollars]

Year and source of funds	Type of service				
	Total care	Hospital	Physician	Nursing home	Other care
1977					
Total.....	43,425	18,906	7,782	10,696	6,041
Private	15,669	2,319	3,323	5,424	4,603
Consumer.....	15,499	2,263	3,320	5,352	4,564
Out-of-pocket	12,706	927	2,147	5,264	4,368
Insurance	2,793	1,336	1,173	88	195
Other private.....	170	56	3	72	39
Government.....	27,756	16,587	4,458	5,272	1,438
Medicare.....	19,171	14,087	4,158	348	578
Medicaid.....	6,049	733	232	4,453	631
Other government.....	2,536	1,767	68	470	230
1984					
Total.....	119,872	54,200	24,770	25,105	15,798
Private	39,341	6,160	9,827	13,038	10,316
Consumer.....	38,875	5,964	9,818	12,856	10,237
Out-of-pocket	30,198	1,694	6,468	12,569	9,467
Insurance	8,677	4,270	3,350	287	770
Other private.....	466	196	9	182	79
Government.....	80,531	48,040	14,943	12,067	5,482
Medicare.....	58,519	40,524	14,314	539	3,142
Medicaid.....	15,288	2,595	467	10,418	1,808
Other government.....	6,724	4,920	162	1,110	532
1987					
Total.....	162,000	67,900	33,500	32,800	27,800
Private	60,600	10,100	11,900	19,200	19,500
Government.....	101,500	57,900	21,600	13,600	8,300
Medicare.....	72,200	47,300	20,300	600	4,100
Medicaid.....	19,500	3,300	500	11,900	3,700

Source: Office of Financial and Actuarial Analysis, Health Care Financing Administration as reported in Waldo, Daniel R., and Helen C. Lazenby. "Demographic characteristics and health care use and expenditures by the aged in the United States: 1977-1984." Health Care Financing Review, Fall 1984 No. 1, p. 1; and Waldo, Daniel R. et al. "Health Expenditures by Age Group, 1977 and 1987." Health Care Financing Review, Summer 1989, Vol. 10, No. 4 and errata reprint Fall 1989, Vol. 11, No. 1, p. 167.

TABLE 11.—SOURCES OF HEALTH INSURANCE COVERAGE FOR THE NON-INSTITUTIONALIZED ELDERLY, BY RATIO OF INCOME TO POVERTY, 1991
[Population in thousands]

	Individuals with family income—						Total	
	Under 100 percent of poverty		100–199 percent of poverty		200 percent of poverty or more		Number	Percent
	Number	Percent	Number	Percent	Number	Percent		
Total Medicare.....	3,619	95.7	8,413	98.1	17,346	95.1	29,377	96.0
Medicare only.....	1,323	35.0	2,625	30.6	2,825	15.5	6,773	22.1
Medicare plus:								
Private supplement.....	872	23.1	3,211	37.5	5,742	31.5	9,826	32.1
Employer coverage.....	205	5.4	1,294	15.1	7,421	40.7	8,920	29.2
Medicaid.....	1,063	28.1	818	9.5	407	2.2	2,288	7.5
CHAMPUS.....	(¹)	(¹)	145	1.7	212	1.2	383	1.3
2 or more supplements.....	130	3.4	320	3.7	738	4.1	1,188	3.9
Insured through non-Medicare plan only.....	(¹)	(¹)	96	1.1	769	4.2	924	3.0
Uninsured.....	104	2.8	(¹)	(¹)	122	0.7	289	1.0
Total.....	3,781	100.0	8,573	100.0	18,237	100.0	30,590	100.0
Percent of all elderly.....		12.4		28.0		59.6		100.0

¹ Sample size too small for reliable estimates.

Source: CRS analysis of data from the March 1992 Current Population Survey.

BACKGROUND DATA ON LONG-TERM CARE

The phrase "long-term care" refers to a broad range of medical, social, personal, supportive, and specialized housing services needed by individuals who have lost some capacity for self-care because of a chronic illness or condition. Chronic illnesses or conditions often result in both functional impairment and physical dependence on others for an extended period of time. Major subgroups of persons needing long-term care include the elderly and non-elderly disabled, persons with developmental disabilities (primarily persons with mental retardation), and persons with mental illness. This section of appendix B focuses on the elderly long-term care population.

The range of chronic illnesses and conditions resulting in the need for supportive long-term care services is extensive. Unlike acute medical illnesses, which occur suddenly and may be resolved in a relatively short period of time, chronic conditions last for an extended period of time and are not typically curable. Although chronic conditions occur in individuals of all ages, their incidence, especially as they result in disability, increases with age. These conditions may include heart disease, strokes, arthritis, osteoporosis, and vision and hearing impairments. Dementia, the chronic, often progressive loss of intellectual function, is also a major cause of disability in the elderly.

The presence of a chronic illness or condition alone does not necessarily result in a need for long-term care. For many individuals, their illness or condition does not result in a functional impairment or dependence and they are able to go about their daily routines without needing assistance. It is when the illness or condition results in a functional or activity limitation that long-term care services may be required.

The need for long-term care by the elderly is often measured by assessing limitations in a person's capacity to manage certain functions or activities. For example, a chronic condition may result in dependence in certain functions that are basic and essential for self-care, such as bathing, dressing, eating, toileting, and/or moving from one place to another. These are referred to as limitations in "activities of daily living," or ADLs. Another set of limitations, which reflect lower levels of disability, are used to describe difficulties in performing household chores and social tasks. These are referred to as limitations in "instrumental activities of daily living," or IADLs, and include such functions as meal preparation, cleaning, grocery shopping, managing money, and taking medicine. Limitations can vary in severity and prevalence, so that persons can have limitations in any number of ADLs or IADLs, or both.

Long-term care services are often differentiated by the settings in which they are provided. In general, services are provided either in nursing homes or in home and community-based care settings. Nursing home care includes a wide variety of services that range from skilled nursing and therapy services to assistance with such personal care functions as bathing, dressing, and eating. Nursing home services also include room and board. All of these services are considered to be formally provided services, in that they require persons to pay the facility for care that is provided.

Home and community-based care also includes a broad range of skilled and personal care services, as well as a variety of home management activities, such as chore services, meal preparation, and shopping. Home care services can be provided formally by home care agencies, visiting nurse associations, and day care centers. Home care is also provided informally by family and friends who are not paid for the services they provide. In contrast to nursing home care, which by necessity is formally provided care, most home and community-based care is provided informally by family and friends. Research has shown that more than 70 percent of those elderly persons living in the community and needing long-term care assistance rely exclusively on nonpaid sources of assistance for their care.

The long-term care population

Chart 3 shows that an estimated 10.6 million persons of all ages require assistance with one or more ADLs or IADLs. About two-thirds of this total, or 7.1 million persons, are elderly. This is about one-quarter of the nation's elderly population.

Another 3.5 million persons under the age of 65 are limited in ADLs and/or IADLs. Some of these persons have congenital or developmental conditions such as cerebral palsy or mental retardation. Others are disabled from traumatic accidents or the onset of chronic conditions such as multiple sclerosis.⁷ It should be noted that these estimates do not adequately measure the need for long-term care among young children, since ADL and IADL limitations are not appropriate measures of their disabilities.

Chart 3 also indicates that the great majority of persons with ADL and/or IADL limitations live in the community. Of the total disabled population, 84 percent live in the community. The nursing home population amounts to only 16 percent of the total, with the elderly by far the greatest share of this group.

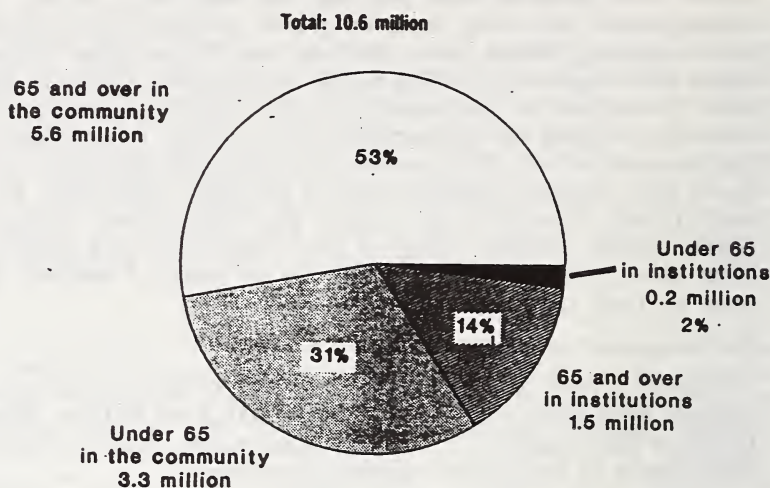
Based on the projected growth of the elderly population in the future, major increases can be anticipated in the number of persons needing assistance with ADL and/or IADL limitations. Currently 32 million persons are 65 years of age and older. That number is expected to double to about 66 million by the year 2030. The 85+ population, the group at greatest risk of needing and using long-term care services, is expected to increase from 3.3 million persons in 1990 to 8.1 million in 2030.⁸ One study has estimated that the number of elderly needing assistance with ADLs and/or IADLs will grow from 7.1 million to 13.8 million by 2030, and the number requiring nursing home care will grow from 1.5 million to 5.3 million by that year.⁹

⁷ A Call for Action, p. 91.

⁸ U.S. Senate, Special Committee on Aging. "Aging America: Trends and Projections." November 1989. Sen. Prt. 101-59, p. 4.

⁹ A Call for Action, p. 108.

CHART 3. PERSONS WITH ADL AND/OR IADL LIMITATIONS, 1990



Source: A Call for Action, The Pepper Commission, Final Report, September 1990. Based on Lewin/ICF Estimates Prepared for the Commission.

THE NURSING HOME POPULATION ¹⁰

Demographic characteristics

Analysis of the 1985 National Nursing Home Survey (NNHS) shows that the great majority of nursing home residents are 65 years of age and older. In 1985, 88 percent of residents were 65 years of age and older, and 12 percent were under the age of 65. As the top half of table 12 indicates, less than 5 percent of the total elderly population in the country were residents of nursing homes on any given day in 1985, and 0.1 percent of the under 65 population were residents in that year.

Although in the aggregate less than 5 percent of the total elderly population was in a nursing home on any given day in 1985, younger and older age groups of the elderly show very different rates of utilization. Table 12 and chart 4 show that about 1 percent of the 65-74 age group and about 6 percent of the 75-84 age group resided in nursing homes in 1985. For the very old, those 85 and older, however, the incidence rate increases dramatically. In 1985, 22 percent of the 85 and older group resided in nursing homes. This group accounted for 40 percent of total nursing home residents, and 45 percent of the elderly nursing home population.

Chart 4 also illustrates that, among each of the age groups of the elderly, women were more likely to reside in nursing homes than

¹⁰ This material is drawn largely from "Characteristics of Nursing Home Residents and Proposals for Reforming Coverage of Nursing Home Care," by Richard Price, Richard Rimkunas, and Carol O'Shaughnessy, CRS Report for Congress, No. 90-471 EPW, September 24, 1990.

men. For the elderly as a whole, women were twice as likely to be residing in nursing homes in 1985 as men (6 percent of women as opposed to 3 percent for men). The difference for men and women is particularly striking in the 75-84 and 85 and older age groups. Higher incidence rates for women, largely the result of longer life expectancies for women, mean a nursing home population that is predominately female. Chart 5 indicates that 72 percent of nursing home residents were female in 1985.

TABLE 12.—NURSING HOME RESIDENTS AS A PROPORTION OF TOTAL POPULATION, BY AGE AND SEX, 1985

[All nursing home and U.S. population estimates in thousands]

Age	All residents		
	Nursing home pop.	U.S. pop.	Percent
Under 65.....	173	210,197	0.1
65 to 74.....	212	17,009	1.2
75 to 84.....	508	8,836	5.7
85 and older.....	597	2,695	22.1
65 and older.....	1,317	28,540	4.6
Total.....	1,490	238,737	0.6

Age	Males			Females		
	Nursing home pop.	U.S. pop.	Percent	Nursing home pop.	U.S. pop.	Percent
Under 65.....	89	104,623	0.1	84	105,574	0.1
65 to 74.....	81	7,475	1.1	132	9,534	1.4
75 to 84.....	141	3,293	4.3	367	5,543	6.6
85 and older.....	112	769	14.6	485	1,926	25.2
65 and older.....	334	11,537	2.9	984	17,003	5.8
Total.....	423	116,160	0.4	1,068	122,577	0.9

Note.—Figures are based on the number of current nursing home residents and U.S. Census Bureau estimates of the resident population. Figures do not reflect the likelihood of any individual being in a nursing home; rather these estimates indicate the percent of the total population that resided in nursing homes at a given point in time in 1985.

Source: Estimates prepared by CRS using the 1985 National Nursing Home Survey, Current Resident File, and U.S. Bureau of the Census, Current Population Report, United States Population Estimates, by Age, Sex and Race: 1980 to 1987, series P-25, No. 1022, March 1988. These estimates are subject to limitations of the data and methods employed.

CHART 4. SHARE OF RESIDENT POPULATION IN NURSING HOMES, 1985

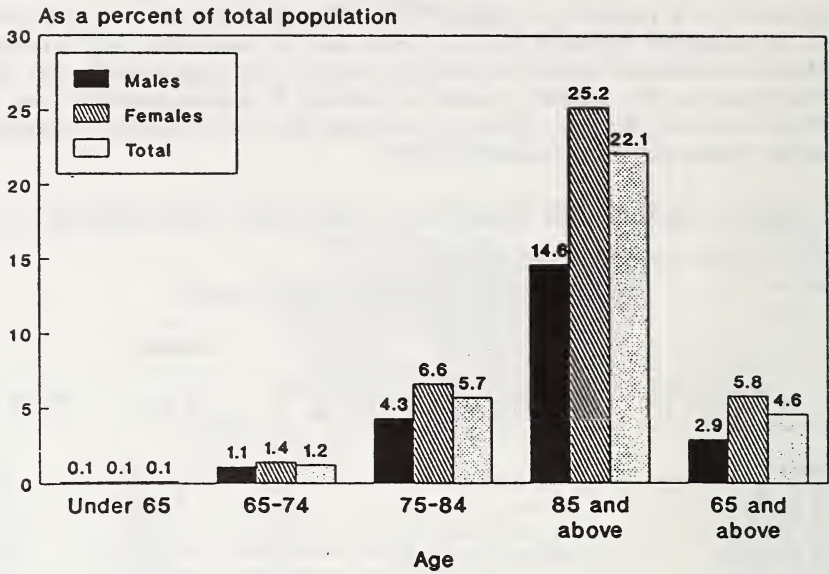
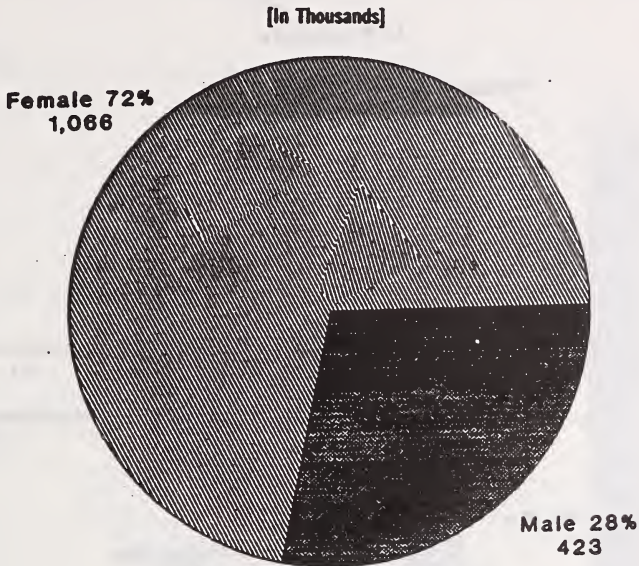


CHART 5. DISTRIBUTION OF CURRENT RESIDENTS, BY SEX, 1985



Studies have shown that persons without spouses are more likely to enter nursing homes than persons with spouses.¹¹ Because many disabled persons often require a great deal of assistance, spouses are often the only person outside of nursing homes able to provide such intensive care. Chart 6 indicates that, at admission, only 16 percent of nursing home residents were married. Of the remaining, 56 percent were widowed, 18 percent had never been married, and about 8 percent were either divorced or separated.

Chart 7 shows that, among the elderly, the proportion of residents who were married at admission decreases with age, and the proportion who were widowed increases.

¹¹ "Financing of Long-Term Care." Submitted to the Assistant Secretary of Planning and Evaluation, U.S. Department of Health and Human Services. Contract No. HHS-100-86-051, September 30, 1988. p. I-9.

CHART 6. DISTRIBUTION OF CURRENT RESIDENTS, BY MARITAL STATUS AT ADMISSION, 1985

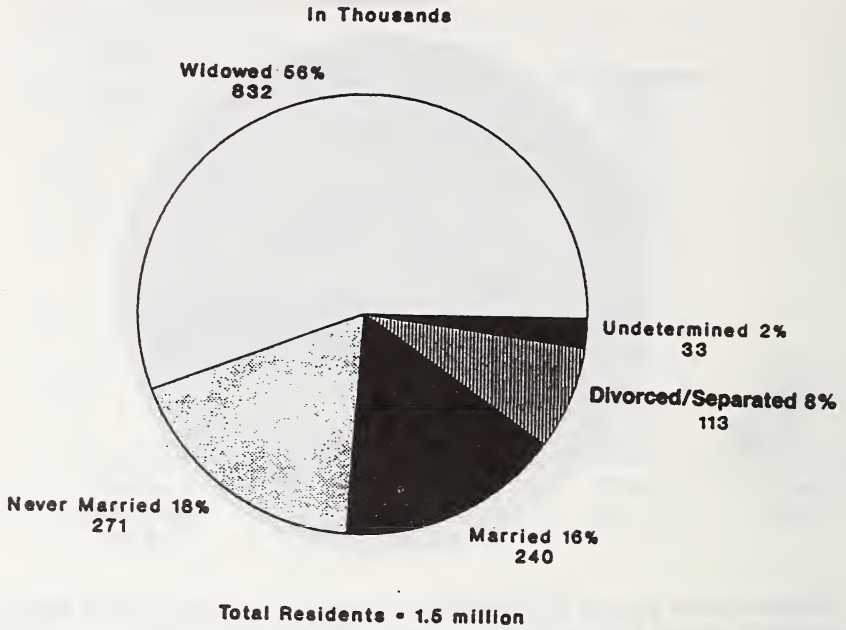
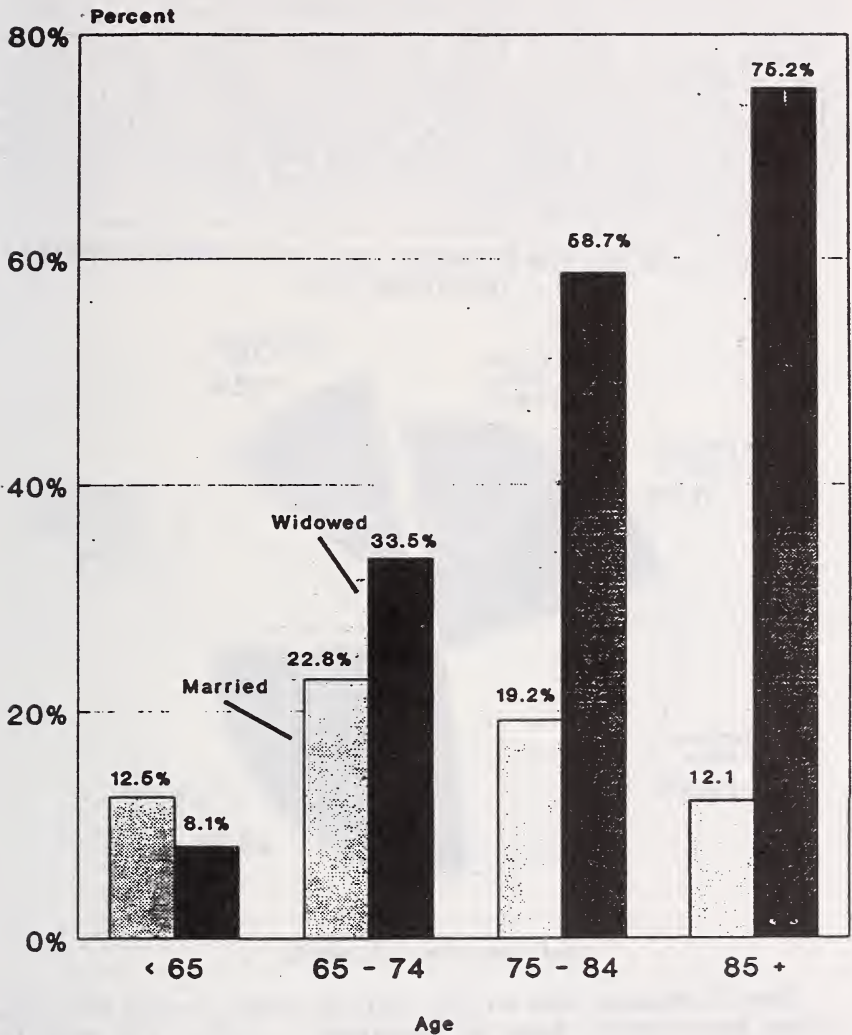


CHART 7. PERCENT OF CURRENT RESIDENTS, MARRIED AND WIDOWED, BY AGE, 1985



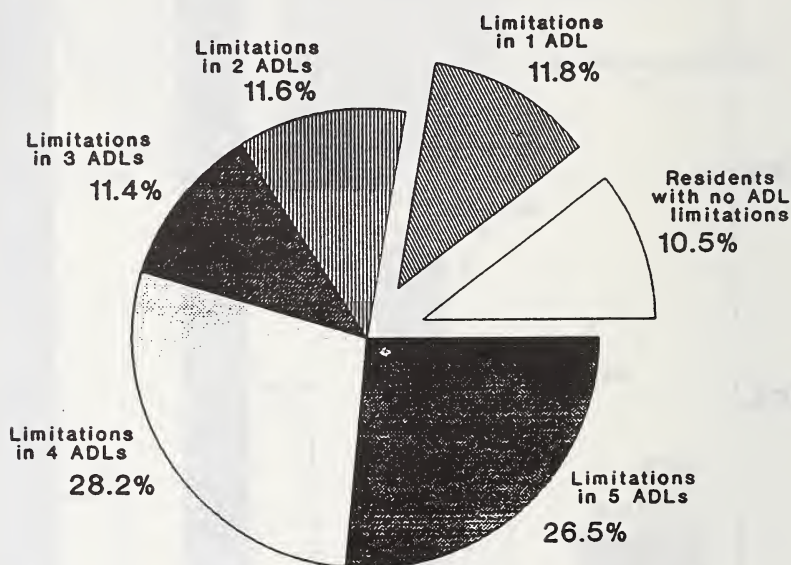
Number and type of ADL limitations of nursing home residents

Chart 8 presents data on the number of limitations in ADLs exhibited by nursing home residents of all ages in 1985. This figure shows that nursing home residents have substantial functional limitations. Seventy-eight percent of residents needed the assistance of others in two or more ADLs. Almost 55 percent of the nursing home population was severely impaired with four or more ADLs.

Chart 8 also shows that slightly more than 20 percent of nursing home residents were judged to have no, or only one, activity limita-

tion. A review of the diagnosis classifications of residents by their number of ADLs shows that residents whose primary diagnosis was a mental disorder were disproportionately represented among the total number of residents who had no activity limitation. About 35 percent of those with no ADLs had a mental disorder as their primary diagnosis. Mental disorders include a wide range of disabilities, including dementias, psychoses, and mental retardation. Persons with mental disorders but without limitations in ADLs may be residents of nursing homes because they require supervision or because of the unavailability of other housing and social service arrangements in the community.

CHART 8. DISTRIBUTION OF CURRENT RESIDENTS BY NUMBER OF ADL LIMITATIONS, 1985



Total Residents = 1.5 million

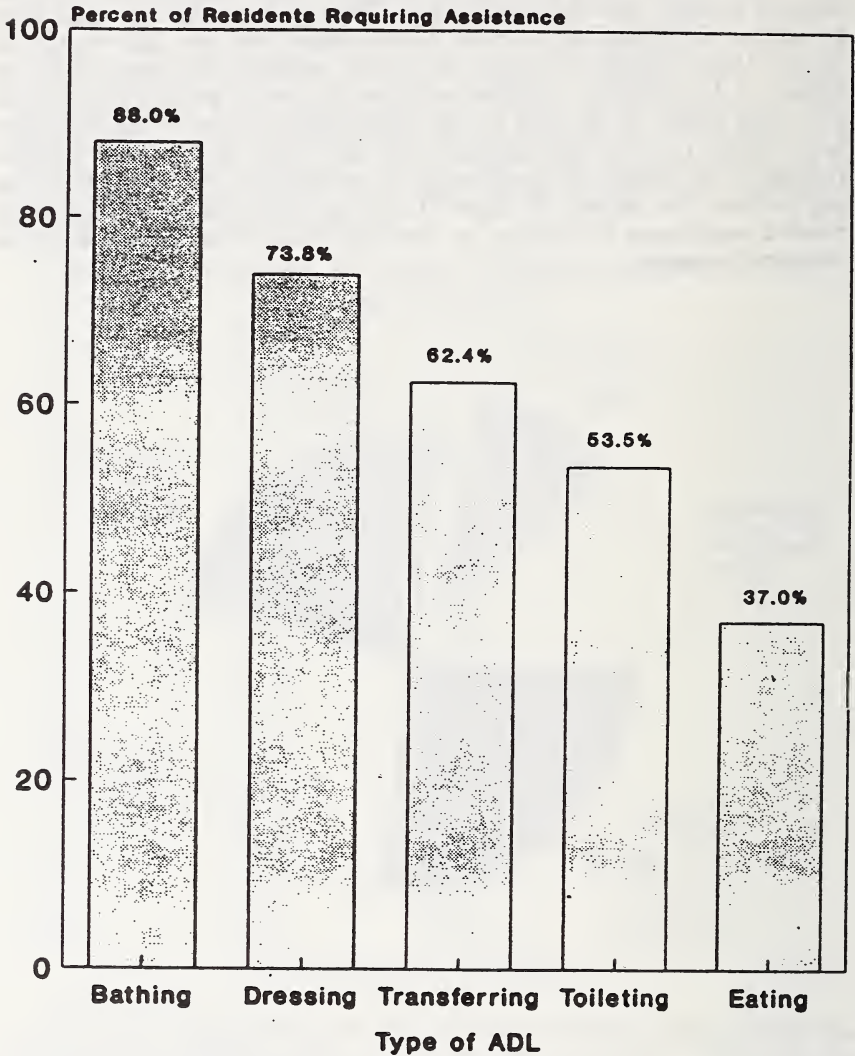
Chart 9 presents data on the extent to which nursing home residents have various kinds of limitations in ADLs. The most frequently found limitation among residents was bathing, with 88 percent of residents needing the assistance of another person. The least prevalent ADL was in eating, with slightly more than one-third of residents needing assistance with this ADL. About three-quarters of residents needed assistance to dress and two-thirds needed assistance in getting out of a bed or chair (transferring). About half of all residents needed the assistance of others in getting to the toilet or in caring for an ostomy bag or catheter.

In developing measures of functional limitations, researchers have found an ordered regression in functional abilities as part of

the natural aging process. Loss of functioning begins with activities which are most complex and least basic, such as bathing or dressing. Functions which are least complex and most basic, such as feeding oneself, are retained longer. That is, persons are most able to retain their ability to feed themselves, but are less likely to retain their ability to bathe or dress without the assistance of others.¹² In addition, persons who are the most severely impaired are least likely to be able to eat independently, and therefore are more likely to have limitations in all the other ADLs. This ordered regression in stages of functioning is reflected in the nursing home population. As shown in chart 9, higher proportions of residents needed assistance in bathing or dressing than those who needed assistance in eating.

¹² Katz, Sidney and Amechi Akpom. "A Measure of Primary Sociobiological Functions." *International Journal of Health Services*, Vol. 6, No. 3, 1976.

CHART 9. PERCENT OF RESIDENTS REQUIRING ASSISTANCE OF ANOTHER PERSON IN PERFORMING ACTIVITY, 1985



Nursing home length of stay

The profile of nursing home residents presented above suggests a fairly homogeneous population: largely very elderly, female, widowed, and very disabled. However, an examination of length-of-stay patterns among the nursing home population suggests a more diverse group of persons using care than might be suggested by demographic data alone.

Analysis of discharge data from the NNHS shows at least two major users of nursing home care, as illustrated in charts 10 and 11. Chart 10 portrays the distribution of persons discharged from nursing homes in 1984-85, according to their length of stay. Chart 11 shows the distribution of days of care used by all discharged residents. It should be noted that the discharge file of the NNHS does not provide a comprehensive picture of the use of nursing home care by a single group of persons over time. As a result, estimates based on discharge survey data must be considered very general orders of magnitude of lengths of stay in a nursing home.

Chart 10 shows that most nursing home stays are relatively short. About 52 percent of persons discharged from nursing homes had stays of less than 90 days and about 63 percent of persons discharged had stays of less than 6 months. In contrast, 27 percent of persons discharged had long stays of 1 year or longer, and 17 percent had stays of 2 years or longer.

The distribution of total days of care used by discharged residents is strikingly different. Chart 11 shows that persons with stays of less than 3 months accounted for only 4 percent of days of care. Those with stays of less than 6 months accounted for 8 percent of all days. On the other hand, persons with stays of 2 or more years accounted for about 73 percent of all discharge days. In other words, persons with short stays accounted for the majority of persons discharged from nursing homes, but very few of the days of care used. Those with long stays accounted for relatively few of those persons discharged from nursing homes, but the bulk of days used.

CHART 10. DISTRIBUTION OF DISCHARGED RESIDENTS BY LENGTH OF STAY, 1984-85

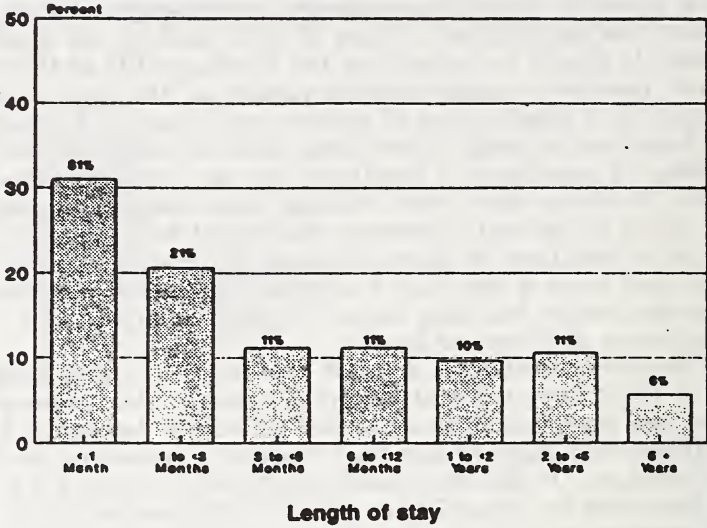
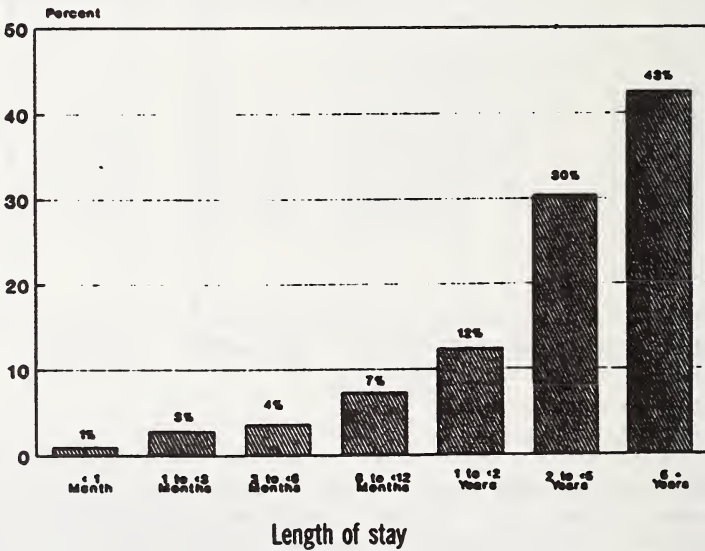


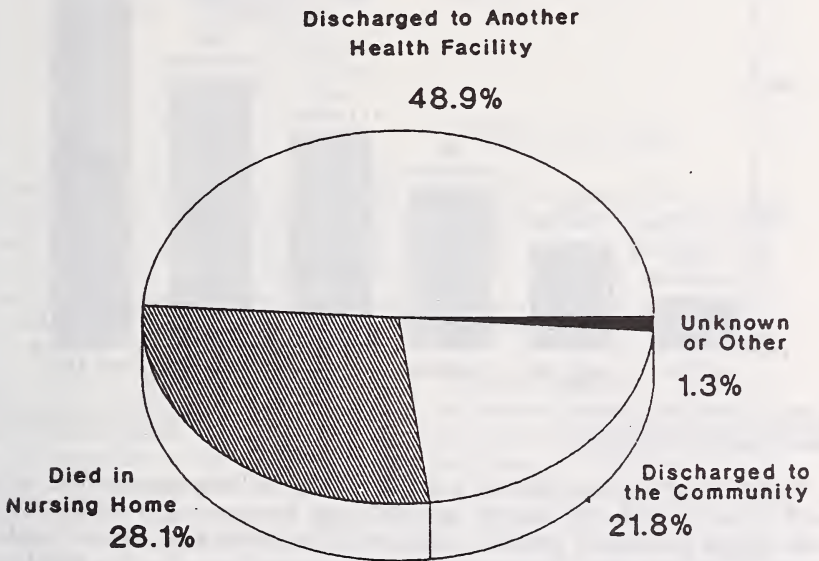
CHART 11. DISTRIBUTION OF TOTAL DAYS USED BY DISCHARGED RESIDENTS, BY LENGTH OF STAY, 1984-85



Status of nursing home residents following discharge

Chart 12 shows the distribution of residents by their status following discharge. In 1984-85, the largest share of persons—about 50 percent—were discharged from the nursing home to a hospital or other health care facility, including nursing homes (about 7 percent were discharged to another long-term care facility). About 28 percent of discharges were due to death in the nursing home. About 22 percent of the residents were discharged to the community. This mortality rate and the rate of return to the community may be conservative estimates. For example, 10 percent of those discharged from nursing homes to other health facilities died in these other facilities. Others are likely to have returned to the community.

CHART 12. DISTRIBUTION OF DISCHARGED RESIDENTS BY LIVING ARRANGEMENT AFTER DISCHARGE, 1984-85



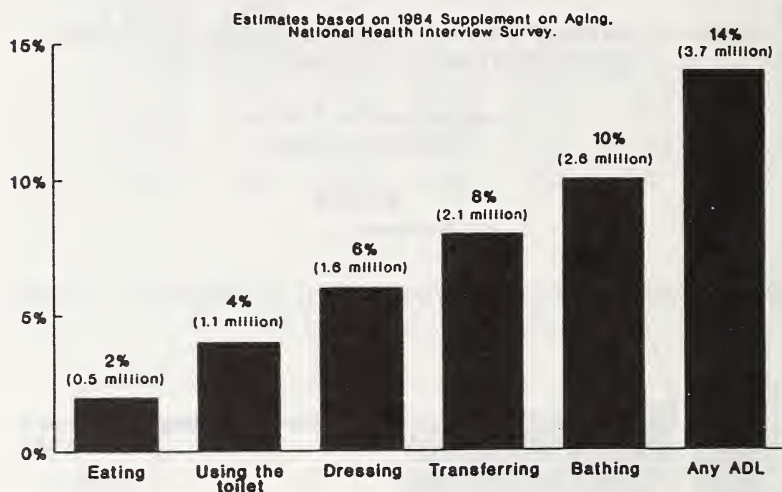
Total Residents • 1.2 Million

The community-based long-term care population

Chart 3 above showed that the great majority of persons with ADL and/or IADL limitations live in the community. Almost 9 million persons of all ages, or 84 percent of the total population with ADL and/or IADL limitations, live in the community. The elderly represented almost 63 percent of this total.

Chart 13 shows the number and percent of elderly persons living in the community with ADL limitations by type of limitation, as of 1984.¹³ A total of 3.7 million elderly persons living in the community, or 14 percent of the total elderly population, reported some limitation in their ability to bathe, transfer, dress, toilet, or eat. The prevalence of these ADLs forms a hierarchy similar to that shown above in chart 8 for the nursing home population. The most prevalent limitation was in bathing, with 10 percent of the elderly reporting difficulty with this ADL. The least common was in eating, with 2 percent of elderly persons reporting difficulty.

CHART 13. PERCENT OF ELDERLY IN THE COMMUNITY WITH ADL LIMITATIONS, BY TYPE OF LIMITATION, 1984



Source: Rowland, Diane. *Health Affairs*, v. 8, p. 42. *Measuring the Elderly's Need for Home Care*.

% based on 26.4 million persons
65 years or older.

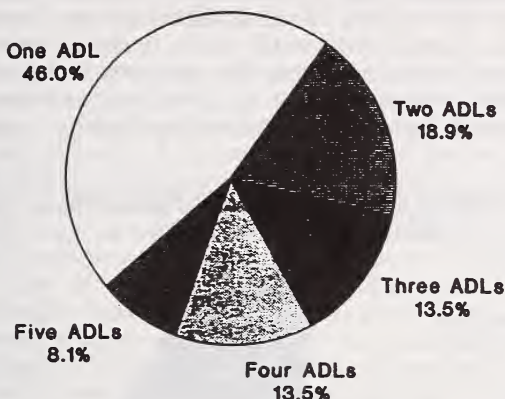
Chart 14 indicates that 54 percent of the elderly population with any kind of ADL limitation in 1984 had two or more ADLs. This was about 2 million persons. Almost 22 percent has 4 or 5 limitations. The severity of impairment is not uniform in the disabled population. Among the 2 million persons with two or more ADLs, 1.1 million reported some difficulty and 0.9 million reported a lot of difficulty or inability to perform at least two ADLs.¹⁴

¹³ Rowland, Diane. "Measuring the Elderly's Need for Home Care," *Health Affairs*, winter 1989, vol. 8, p. 42.

¹⁴ Rowland, p. 43.

CHART 14. DISTRIBUTION OF ADL'S AMONG NONINSTITUTIONALIZED ELDERLY POPULATION HAVING ONE OR MORE ADL LIMITATIONS, 1984

Estimates based on 1984 Supplement on Aging, National Health Interview Survey.



Total-3.7 million impaired persons 65 years or older.

Studies have shown that the great bulk of care provided to persons living in the community with ADL and/or IADL limitations is provided informally by family and friends who are not paid for the care they provide. Chart 15 indicates that 70 percent of severely disabled elderly persons receiving long-term care in the community relied solely on informally provided care. Only 3 percent relied only on formal or paid care.

More than 7 million spouses, adult children, other relatives, friends, and neighbors provided unpaid assistance to disabled elderly persons in 1984.¹⁵ Seven out of ten informal caregivers bear the major responsibility for care provided, and one of three is a sole provider. Three-quarters of all caregivers are female—wives and daughters of persons needing care. Research has shown that caregivers often reduce their work hours, take time off without pay, or quit jobs because of elder caregiving responsibilities. In addition, many caregivers are themselves elderly—one-quarter are between the ages of 65 to 74 and another 10 percent are 75 or older.

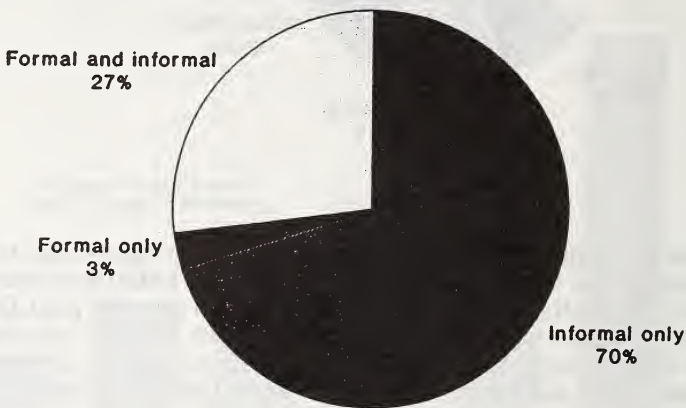
Use of formal, paid services by elderly persons living in the community is related to various characteristics of this group.¹⁶ Differences in functional status have been found to be strongly related to use of formal home and community-based care, with the likelihood of using any formal service increasing as levels of impairment in-

¹⁵ A Call for Action, p. 93-95. This discussion draws heavily on this report and research published by Robyn Stone, et al., "Caregivers of the Frail Elderly: A National Profile," *The Gerontologist*, vol. 27, 1987.

¹⁶ This material is drawn largely from Short, Pamela and Joel Leon, "Use of Home and Community Services by Persons Ages 65 and Older with Functional Difficulties," National Medical Expenditure Survey, Research Findings 5, Department of Health and Human Services, Agency for Health Care Policy and Research, September 1990, p. 7-9.

crease. Age is also linked to the use of formal services, largely explained by the fact that age is associated with decreasing functional status. In general and in each age group of the elderly, more women use formal home and community-based care services than men. This is related to the longer life expectancies of women. Persons living alone are more than twice as likely to use formal services as compared to those living with other persons. In addition, the amount of money spent on home care services has been found to be directly related to income; that is, out-of-pocket expenses for home care increase substantially as median family income increases.¹⁷

CHART 15. SOURCE OF HOME CARE SERVICES FOR THE SEVERELY DISABLED ELDERLY POPULATION, 1989



Source: Lewin/ICF and the Brookings Institution, 1989 estimates based on National Long-Term Care Survey, 1982.

Note: Severely disabled refers to those persons with three or more ADL limitations.

Public and private spending for long-term care

Table 13 indicates that sizable public and private funds are being spent on long-term care services. For two major categories of long-term care services, nursing home and home health care, total national spending amounted to almost \$70 billion in 1991. This total is for all age groups using long-term care. It should also be noted that the total for home health care excludes spending for nonmedical home care services supported by the Older Americans Act, the Social Services Block Grant, and State programs. By far the greatest portion of spending is for nursing home care. About \$60 billion, or 86 percent of the total, was spent for nursing home care in 1991. This amounted to over 9 percent of total personal health care spending in 1991.

¹⁷ Liu, Korbin, Kenneth Manton, and Barbara Liu, "Home Care Expenses for the Disabled Elderly," *Health Care Financing Review*. Winter 1985, vol. 7, No. 2, p. 55.

Public programs paid almost 54 percent of the Nation's total nursing home bill. Medicaid payments accounted for almost all of this amount. Medicaid is the Federal-State health program for the poor and for those who have become poor as the result of incurring large medical care expenses. In 1991, Medicaid spending for nursing home care amounted to 47 percent of total national nursing home spending.

Table 13 shows that private spending accounted for about \$28 billion, or the other half of total spending for nursing home care. Nearly all private spending for nursing home care—93 percent—was paid directly by consumers out-of-pocket with income and/or accumulated resources. Private insurance coverage for long-term nursing home care, a portion of the last line in the table, is very limited, with private insurance payments amounting to 1 percent of total spending for nursing home care in 1991.

By way of contrast, spending for home health care services amounted to less than \$10 billion, or 14 percent of the total. Public programs accounted for about 71 percent of total home health care spending. Out-of-pocket payments accounted for almost 44 percent of private spending, private insurance again being very limited for this care. Most home and community-based care, as discussed above, is provided by family and friends who are not paid for the services they provide.

TABLE 13.—NATIONAL NURSING HOME AND HOME HEALTH CARE EXPENDITURES, BY SOURCE, 1991

[Dollars in billions]

Source of spending	Amount
Nursing home care:	
Medicaid.....	\$28.4
Medicare	2.7
Other Federal.....	1.1
Other State.....	.1
Out-of-pocket payments.....	25.8
Private insurers and private organizations.....	1.8
Total	¹ 59.9
Home health care:	
Medicaid.....	2.6
Medicare	4.4
Other Federal programs.....	
Other State.....	.0
Out-of-pocket payments.....	1.2
Private insurers and private organizations.....	1.5
Total	9.8
Total long-term care expenditures.....	69.7

¹ Numbers do not total due to rounding.

Major Federal programs supporting long-term care

Five programs represent the major source of Federal financial support available for nursing home and community-based long-term care—Medicaid, Medicare, the Social Services Block Grant (SSBG), the Older Americans Act, and the Supplemental Security Income (SSI) program. None of these programs supports the full range of long-term care services. Certain programs provide health services but exclude social services. Others provide strictly social services. Some have income eligibility requirements, others do not.

Medicaid is the Nation's major program of financial support for long-term care, principally because of its coverage of nursing home care. Medicaid payments for nursing home care (excluding nursing homes for the mentally retarded) amounted to about 27 percent of total Medicaid spending in fiscal year 1991. Comparatively little funding is devoted to home and community-based care. Coverage of both nursing home and home and community-based services is restricted to those persons who have limited income and assets. In general, Medicaid rules limit eligibility to those persons who qualify for cash welfare assistance or who incur large health care expenses that deplete their income and assets.¹⁸

Medicare, the Federal health insurance program for the elderly and disabled, is focused primarily on coverage for acute health care costs and was never envisioned to provide protection for long-term care. Coverage of nursing home care, for instance, is limited to short-term stays in certain kinds of nursing homes, referred to as skilled nursing facilities, and only for those persons who demonstrate a need for daily skilled nursing care following a hospitalization. Many persons who require long-term nursing home care do not need daily skilled nursing care, and therefore, do not qualify for Medicare's benefit. As a result of this restriction, Medicare paid for about 4.5 percent of the Nation's expenditures for nursing home care in 1991.

For similar reasons, Medicare pays for only limited amounts of community-based long-term care services, primarily through the program's home health benefit. To qualify for home health services, the person must be in need of skilled nursing care on an intermittent basis, or physical or speech therapy. Most chronically impaired persons do not need skilled care to remain in their homes, but rather nonmedical supportive care and assistance with basic self-care functions and daily routines that do not require skilled personnel.

Three other Federal programs—SSBG, the Older Americans Act, and the SSI program—provide support for community-based long-term care services for impaired elderly persons. The SSBG provides block grants to the States for a variety of home-based services for the elderly as well as the disabled and children. The Older Americans Act also funds a broad range of in-home services for the elderly. Under the SSI program, the federally administered income assistance program for aged, blind, and disabled persons, many States provide supplemental payments to the basic SSI payment to sup-

¹⁸ Most States extend Medicaid eligibility to persons who qualify for welfare benefits under the Supplemental Security Income (SSI) program. SSI requires that persons have assets that do not exceed \$2,000 and income that does not exceed \$434 per month in 1993.

port selected community-based long-term care services for certain eligible persons, including the frail elderly. However, since funding available for these three programs is limited, their ability to address the financing problems in long-term care is also very limited.

Spending down for Medicaid coverage of nursing home care

As discussed above, the Medicaid program is the major public source of support for the cost of nursing home care. Its spending for nursing home care is driven largely by its coverage of persons who are not initially poor but who become poor by depleting their assets on the cost of care. At an average cost of \$30,000 a year, nursing home costs can quickly deplete the resources of an elderly individual, especially after prolonged stays, and these costs also exceed the monthly income of most persons. The depletion of financial resources on the cost of care and the movement from private payment for care to Medicaid coverage is referred to as the "spend-down" process. In 1991, Medicaid nursing home payments for elderly persons who spent down amounted to 60 percent of total Medicaid payments for all services for all elderly beneficiaries.¹⁹

Numerous studies have looked at Medicaid spend-down in the last 5 years. A recent review of these studies, "A Synthesis and Critique of Studies on Medicaid Asset Spenddown" by Adams, Meiners and Burwell, found that they generally use two different measures of Medicaid asset spenddown.²⁰ One method measures the percentage of persons originally admitted to nursing homes as private payers who eventually convert to Medicaid prior to final discharge. This method is a measure of the risk to individuals of spending down to Medicaid over the course of their lifetimes, given the probability they enter a nursing home as private payers.

A second method of measuring Medicaid spenddown examines the percentage of Medicaid residents of nursing homes who were not eligible for Medicaid when they were originally admitted. This method can be useful in capturing the proportion of State Medicaid expenditures for nursing home care that is accounted for by those who spend down.

The review of spenddown studies, which use several different national and State-level data bases, found widely varying estimates of spenddown as measured by these two methods. According to the

¹⁹ Spending down under Medicaid is a two-step process. First persons must meet the resources or assets test. The term "resources" generally refers to liquid assets such as cash on hand, savings and checking accounts, stocks and bonds, etc. In order to become eligible for Medicaid, the value of the individual's available resources must be less than a State-determined dollar standard, usually \$2,000 for an individual without a spouse, the level used for the SSI program. Certain items, such as the house, are excluded as countable resources under SSI and Medicaid rules. Second, after an individual has depleted virtually all accumulated resources on the cost of nursing home care, or has transferred resources (for less than fair market value) prior to the time when eligibility could be denied because of the transfer, income standards are then considered. Most States have no absolute upper limit on income for applicants residing in nursing homes. These States have what are known as medically needy programs. As long as the applicant's current monthly income is insufficient to cover medical expenses, including the cost of care in the nursing home, the applicant can become eligible for Medicaid. Other States use a special income level to determine eligibility for persons residing in nursing homes. Like the medically needy, these persons have income in excess of cash welfare program standards. By Federal law, the special income level used by States can be no more than three times the basic SSI payment level, or \$1,302 in 1993. This rule is known as the "300 percent rule."

²⁰ This material draws heavily on Adams, E. Kathleen, Mark Meiners, and Brian Burwell, "A Synthesis and Critique of Studies on Medicaid Asset Spenddown," Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services, January 1992.

review, the critical factor explaining differences among these studies is the length of time that persons are studied. The proportion of persons spending down during a single stay is much lower than the proportion of persons who spend down over their entire lifetime, since half or more of persons using nursing home care have multiple stays. In general, studies using national data tend to show lower estimates of spenddown than do State studies that tend to observe people over longer time intervals.

The review of spenddown studies found that between 20 and 25 percent of persons who originally enter nursing homes as private payers convert to Medicaid before final discharge. For this method of measuring spenddown, not enough State studies exist to determine the extent to which spenddown rates vary from State to State.

On the other hand, estimates of spenddown as measured by the percentage of Medicaid residents of nursing homes who were not eligible for Medicaid when they were originally admitted vary considerably across States, reflecting variations in Medicaid eligibility policies across the States as well as other factors. Studies measuring spenddown according to this method have found spenddown rates of 27 percent for Michigan, 31 percent for Wisconsin, and 39 to 45 percent for Connecticut.

Spenddown studies have also examined the length of time it takes for persons to spend down after nursing home admission. The results of these studies reveal that of those people who spend down, the majority spend down within a year of nursing home admission. This finding suggests that most people who spend down have limited assets when they first enter a nursing home.

Certain State studies also show that people who spend down to Medicaid spend more time on Medicaid after converting to Medicaid coverage than they spend as private payers prior to conversion. The studies show that Medicaid-paid days account for at least 65 to 75 percent of all nursing home days used by those who spend down. However, the research also shows that, once eligible for Medicaid, people who spend down pay a greater proportion of total nursing home costs, through contributions of their income they are required to make before Medicaid makes its payment, than persons who are eligible for Medicaid at initial admission. As a result, people who spend down account for a somewhat lower percentage of total Medicaid expenditures than their percentage of Medicaid-covered nursing home days.

Private long-term care insurance

Private long-term care insurance is generally considered to be the most promising private sector option for providing the elderly additional protection for long-term care expenses. Long-term care insurance is a relatively new, but rapidly growing, market. In 1986, approximately 30 insurers were selling long-term care insurance policies of some type and an estimated 200,000 persons were covered by these policies. By 1987, a Department of Health and Human Services Task Force on Long-Term Care Insurance found 73 companies writing long-term care insurance policies covering 423,000 persons. As of December 1991, the Health Insurance Asso-

ciation of America found that more than 2.4 million policies had been sold, with 135 insurers offering coverage.

Although growth has been considerable in a short period of time, the private insurance industry has approached this potential market with caution. Insurers are concerned about the potential for adverse selection in long-term care insurance, where only those persons likely to need care actually buy insurance. In addition, they point to the problem of induced demand for services that can be expected to be generated by the availability of new long-term care insurance. With induced demand, sometimes also referred to as moral hazard, individuals decide to use more services than they otherwise would because they have insurance and/or will shift from nonpaid to paid providers for their care. In addition, insurers are concerned that, given the nature of many chronic conditions, persons who need long-term care will need it for the remainder of their lives, resulting in an open-ended liability for the insurance company.

As a result of these risks, insurers have designed policies that limit their liability for paying claims. Policies have been medically underwritten to exclude persons with certain conditions or illnesses. They have contained benefit restrictions that limit access to covered care. Policies also limit the period of coverage they offer, typically to a maximum of 4 or 5 years. In addition, most plans provide indemnity benefits that pay only a fixed amount for each day of coverage service. If these amounts are not updated for inflation, the protection offered by the policy can be significantly eroded by the time a person actually needs care. Today payment amounts can generally be updated for inflation, but only with significant increases in premium costs.

These design features of long-term care insurance raise issues about the quality of coverage offered purchasers of policies. The insurance industry has responded to some of these concerns by offering new products that provide broadened coverage and fewer restrictions. One of the key issues outstanding in the debate on the role private insurance can play in financing long-term care is the affordability of coverage. The Health Insurance Association of America has reported that policies paying \$80 a day for nursing home care and \$40 a day for home health care with inflation protection and a 20-day deductible period and a 4-year maximum coverage period had an average annual premium in December 1991 of \$1,781 when purchased at the age of 65 and \$5,627 when purchased at the age of 79. Many elderly persons cannot afford these premiums.

The insurance industry believes that affordability of premiums can be greatly enhanced if the pool of persons to whom policies are sold is expanded. The industry has argued that the greatest potential for expanding the pool of persons buying coverage and reducing premiums lies with employer-based group coverage. Premiums should be lower in employer-based group coverage because younger age groups with lower levels of risk of needing long-term care would be included, allowing insurance companies to build up reserves to cover future payments of benefits. In addition, group coverage has lower administrative expenses.

As of December 1991, 288 employers offered a long-term care insurance plan to their employees. These employer-based plans covered over 200,000 employees, their spouses, retirees, parents, and parents-in-law.

But just how broadly based employer interest is in a new long-term care benefit is unclear at the present. Many employers currently face large unfunded liabilities for retiree pension and health benefits. Also, many employers have recently experienced substantial increases in premiums for their current health benefits plans. Very few employers contribute to the cost of a long-term care plan. Most employers require that the employee pay the full premium cost of coverage. In contrast, the majority of medium and large sized employers pay the full premium cost of regular health care benefits for their employees.

APPENDIX C. NATIONAL AND INTERNATIONAL HEALTH CARE EXPENDITURES AND HEALTH INSURANCE COVERAGE

NATIONAL HEALTH EXPENDITURES

During 1965 (the year prior to the beginning of the Medicare and Medicaid programs) national health expenditures were \$41.6 billion; by 1991 annual expenditures were \$751.8 billion, over 16 times that amount (see table 1). Hospital care expenditures are the largest component of national health expenditures, representing 38 percent of total national health spending in 1991. In terms of per capita spending, \$1,101 was spent for hospital care in 1991, compared to \$681 in 1985, an increase of 62 percent over 6 years (see table 3).

Adjusting for inflation, health care expenditures have still increased substantially, rising from \$179.9 billion in 1965 (in constant 1991 dollars) to \$751.8 billion in 1991, an increase of about 318 percent (see table 2). The largest increases occurred between 1965 and 1970 (45 percent) and 1985 to 1991 (41 percent). The annual rate of increase in inflation-adjusted per capita expenditures from 1980 to 1985 was 4.3 percent. For the years 1986 to 1991, the comparable rate was 5.4 percent.

Of the various sources of payment for personal health care expenditures in 1991, private health insurance was the largest (see table 5). In 1991, private health insurance payments (including premiums paid for both employers and employees) were \$209.3 billion and accounted for 32 percent of all payments for personal health care. The Federal Government accounted for 31 percent (\$204.1 billion) of personal health spending (including payments for both Medicare and Medicaid), 12 percent (\$79.1 billion) was paid by State and local sources, and 22 percent (\$144.3 billion) was paid by direct (out-of-pocket) payments by individuals. Philanthropy and in-plant health services accounted for 3.6 percent.¹

¹ Personal health expenditures accounted for 88 percent of national health expenditures in 1991. The remaining 12 percent was expended on program administration; administrative costs of private health insurance and profits earned by private health insurance; noncommercial health research; new construction; and government public health activities.

TABLE 1.—NATIONAL HEALTH EXPENDITURES: AGGREGATE AMOUNTS FOR SELECTED CALENDAR YEARS 1960–1991

[Dollar amounts in billions]

	1960	1965	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
Total.....	\$27.1	\$41.6	\$74.4	\$132.9	\$250.1	\$422.6	\$454.9	\$494.2	\$546.1	\$604.3	\$675.0	\$751.8
Percent of GNP.....	5.3	5.9	7.4	8.4	9.2	10.5	10.7	10.9	11.1	11.5	12.2	13.2
Health services and supplies.....	\$25.4	\$38.2	\$69.1	\$124.7	\$238.9	\$407.2	\$438.9	\$476.9	\$526.2	\$583.6	\$652.4	\$728.6
Personal health care.....	23.9	35.6	64.9	116.6	219.4	369.7	400.8	439.9	482.8	530.9	591.5	660.2
Hospital care.....	9.3	14.0	27.9	52.4	102.4	168.3	179.8	194.2	212.0	232.4	258.1	288.6
Physicians' services.....	5.3	8.2	13.6	23.3	41.9	74.0	82.1	93.0	105.1	116.1	128.8	142.0
Dentists' services.....	2.0	2.8	4.7	8.2	14.4	23.3	24.7	27.1	29.4	31.6	34.1	37.1
Other professional services.....	.6	.9	1.5	3.5	8.7	16.6	18.6	21.1	23.8	27.1	30.7	35.8
Home health care.....	.0	.1	.1	.4	1.3	3.8	4.0	4.1	4.5	5.6	7.6	9.8
Drugs and other medical nondurables.....	4.2	5.9	8.8	13.0	21.6	36.2	39.7	43.2	46.3	50.5	55.6	60.7
Vision products and other medical durables.....	.8	1.2	2.0	3.1	4.6	7.1	8.1	9.1	10.1	10.4	11.7	12.4
Nursing home care.....	1.0	1.7	4.9	9.9	20.0	34.1	36.7	39.7	42.8	47.5	53.3	59.9
Other personal health care.....	.7	.8	1.4	2.7	4.6	6.4	7.1	7.8	8.7	9.8	11.5	14.0
Program administration and net cost of private health insurance.....	1.2	1.9	2.8	5.1	12.2	25.2	24.6	23.0	26.9	33.8	38.9	43.9
Government public health activities.....	.4	.6	1.4	3.0	7.2	12.3	13.5	14.6	16.6	18.9	22.0	24.5
Research, and construction of medical facilities.....	1.7	3.5	5.3	8.3	11.3	15.4	16.0	17.3	19.8	20.7	22.7	23.1

Note: Numbers may not add to totals due to rounding.

Source: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

TABLE 2.—NATIONAL HEALTH EXPENDITURES: IN CONSTANT 1991 DOLLARS, FOR SELECTED CALENDAR YEARS 1960–91

[Dollar amounts in billions]

	1960	1965	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
Total	\$125.0	\$179.9	\$261.1	\$336.6	\$413.4	\$534.9	\$565.3	\$592.5	\$628.7	\$663.8	\$703.4	\$751.8
Health services and supplies.....	117.2	165.0	242.4	315.6	394.8	515.4	545.5	571.8	605.9	641.1	679.8	728.6
Personal health care	110.1	154.0	227.8	295.1	362.6	468.0	498.1	526.7	555.8	583.2	616.3	660.2
Hospital care	42.7	60.7	98.0	132.6	169.3	213.0	223.4	232.9	244.1	255.2	268.9	288.6
Physicians' services	24.3	35.4	47.7	58.9	69.2	93.6	102.0	111.5	121.0	127.5	134.3	142.0
Dentists' services	9.0	12.1	16.4	20.9	23.7	29.4	30.7	32.5	33.9	34.8	35.5	37.1
Other professional services	2.8	3.7	5.3	8.9	14.4	21.0	23.1	25.4	27.4	29.7	32.0	35.8
Home health care .....	.2	.3	.5	1.0	2.2	4.9	5.0	4.9	5.2	6.2	7.9	9.8
Drugs and other medical nondurables	19.6	25.5	30.9	33.0	35.7	45.8	49.4	51.7	53.3	55.4	58.0	60.7
Vision products and other medical durables	3.7	5.4	7.1	7.8	7.5	9.0	10.0	10.9	11.7	11.4	12.2	12.4
Nursing home care	4.5	7.3	17.1	25.2	33.0	43.2	45.6	47.6	49.3	52.2	55.6	59.9
Other personal health care	3.2	3.6	4.8	6.9	7.5	8.1	8.8	9.3	10.1	10.7	12.0	14.0
Program administration and net cost of private health insurance	5.4	8.3	9.7	12.8	20.2	31.9	30.6	27.6	30.9	37.1	40.6	43.9
Government public health activities	1.7	2.7	4.9	7.7	11.9	15.6	16.8	17.5	19.1	20.8	22.9	24.5
Research, and construction of medical facilities	7.8	14.9	18.7	21.0	18.6	19.5	19.8	20.7	22.8	22.7	23.6	23.1

Note: Constant dollar expenditures are calculated using the consumer price index for all urban consumers (CPI-U).

Source: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

TABLE 3.—NATIONAL HEALTH EXPENDITURES: PER CAPITA AMOUNTS FOR SELECTED CALENDAR YEARS 1960-91

[Dollar amounts per capita]

	1960	1965	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
Total.....	\$143	\$204	\$346	\$592	\$1,064	\$1,711	\$1,824	\$1,962	\$2,146	\$2,352	\$2,601	\$2,868
Health services and supplies.....	134	187	322	555	1,016	1,648	1,760	1,893	2,068	2,271	2,513	2,779
Personal health care.....	126	175	302	519	933	1,497	1,607	1,744	1,898	2,066	2,279	2,518
Hospital care.....	49	69	130	233	436	681	721	771	833	904	994	1,101
Physicians' services.....	28	40	63	104	178	299	329	369	413	452	496	542
Dentists' services.....	10	14	22	37	61	94	99	108	116	123	131	141
Other professional services.....	3	4	7	16	37	67	75	84	93	105	118	137
Home health care.....	0	0	1	2	6	16	16	16	18	22	29	37
Drugs and other medical nondurables.....	22	29	41	58	92	146	159	171	182	196	214	231
Vision products and other medical durables.....	4	6	9	14	19	29	32	36	40	41	45	47
Nursing home care.....	5	8	23	44	85	138	147	157	168	185	205	229
Other personal health care.....	4	4	6	12	19	26	28	31	34	38	44	53
Program administration and net cost of private health insurance.....	6	9	13	23	52	102	99	91	106	131	150	167
Government public health activities.....	2	3	6	14	31	50	54	58	65	74	85	94
Research, and construction of medical facilities.....	9	17	25	37	48	62	64	69	78	80	87	88

Note: Numbers may not add to totals due to rounding.

Source: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

TABLE 4.—NATIONAL HEALTH EXPENDITURES: PER CAPITA AMOUNTS, IN CONSTANT 1991 DOLLARS, FOR SELECTED CALENDAR YEARS 1960-91

[Dollar amount per capita]

	1960	1965	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
Total	\$658	\$882	\$1,216	\$1,499	\$1,758	\$2,165	\$2,266	\$2,352	\$2,471	\$2,583	\$2,710	\$2,868
Health services and supplies.....	616	809	1,129	1,406	1,679	2,086	2,187	2,270	2,381	2,495	2,619	2,779
Personal health care	579	755	1,061	1,314	1,542	1,894	1,997	2,091	2,185	2,269	2,374	2,518
Hospital care	225	298	457	591	720	862	896	924	959	993	1,036	1,101
Physicians' services	128	174	222	262	294	379	409	443	476	496	517	542
Dentists' services	48	59	76	93	101	119	123	129	133	135	137	141
Other professional services	15	18	25	40	61	85	93	101	108	116	123	137
Home health care	1	1	2	5	9	20	20	20	20	24	30	37
Drugs and other medical nondurables.....	103	125	144	147	152	185	198	205	209	216	223	231
Vision products and other medical durables.....	20	26	33	35	32	37	40	43	46	45	47	47
Nursing home care.....	24	36	80	112	141	175	183	184	194	203	214	229
Other personal health care	17	17	22	31	32	33	35	37	40	42	46	53
Program administration and net cost of private health insurance	28	41	45	57	86	129	123	109	122	144	156	167
Government public health activities.....	9	13	23	34	51	63	67	69	75	81	88	94
Research, and construction of medical facilities	41	73	87	93	79	79	80	82	90	88	91	88
Average annual [percentage increase]	60-65	65-70	70-75	75-80	80-85	60-90	85-90	89-90	90-91			
Total	6.0	6.6	4.3	3.2	4.3	4.8	4.6	4.9	5.8			
Health services and supplies.....	5.6	6.9	4.5	3.6	4.4	4.9	4.7	5.0	6.1			
Personal health care	5.4	7.1	4.4	3.3	4.2	4.8	4.6	4.6	6.1			
Hospital care	5.8	8.9	5.3	4.0	3.7	5.2	3.7	4.3	6.3			
Physicians' services	6.3	5.0	3.4	2.3	5.2	4.8	6.4	4.3	4.7			

Note: Constant dollar expenditures are calculated using the consumer price indices for all urban consumers (CPI-U). Average annual amounts are calculated on unrounded numbers.
Source: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

TABLE 5.—PERSONAL HEALTH CARE EXPENDITURES: AGGREGATE AMOUNTS AND PERCENTAGE DISTRIBUTION FOR SELECTED CALENDAR YEARS 1960–1991

	1960	1965	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
Amount in billions of dollars												
Total.....	\$23.9	\$35.6	\$64.9	\$116.6	\$219.4	\$369.7	\$400.8	\$439.3	\$482.8	\$530.9	\$591.5	\$660.2
Private.....	18.8	28.4	42.5	71.3	132.3	221.5	239.3	261.9	290.2	315.8	349.2	377.0
Private health insurance.....	5.0	8.7	15.2	29.9	65.3	114.2	124.4	138.1	155.0	170.6	191.2	209.3
Out of pocket.....	13.3	19.0	25.6	38.5	59.5	94.4	100.9	108.8	118.5	126.2	136.5	144.3
Other private sources of funds.....	.4	.7	1.7	2.9	7.6	12.9	14.0	15.0	16.8	19.0	21.5	23.4
Public.....	5.1	7.3	22.4	45.3	87.1	148.2	161.5	177.4	192.5	215.2	242.3	283.3
Federal.....	2.1	3.0	14.6	31.0	63.5	111.7	120.1	130.4	141.7	158.8	177.0	204.1
State and local.....	3.0	4.3	7.8	14.4	23.6	36.6	41.4	46.9	50.9	56.3	65.3	79.1
Percentage distribution												
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private.....	78.6	79.6	65.4	61.1	60.3	59.9	59.7	59.6	60.1	59.5	59.0	57.1
Private health insurance.....	21.0	24.3	23.4	25.6	29.7	30.9	31.0	31.4	32.1	32.1	32.3	31.7
Out of pocket.....	55.9	53.4	39.5	33.1	27.1	25.5	25.2	24.8	24.5	23.8	23.1	21.9
Other private sources of funds.....	1.7	1.9	2.6	2.5	3.5	3.5	3.5	3.4	3.5	3.6	3.6	3.6
Public.....	21.4	20.4	34.6	38.9	39.7	40.1	40.3	40.4	39.9	40.5	41.0	42.9
Federal.....	8.9	8.3	22.6	26.6	28.9	30.2	30.0	29.7	29.3	29.9	29.9	30.9
State and local.....	12.5	12.0	12.0	12.3	10.8	9.9	10.3	10.7	10.5	10.6	11.0	12.0

Note: Numbers may not add to totals due to rounding. Percentage amounts are calculated on unrounded numbers.

Source: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

EXPENDITURES FOR HOSPITAL CARE

The American Hospital Association (AHA) compiles detailed measures of expenses (expenditures) of the Nation's community hospitals, which are defined as all non-Federal short-term general and other special hospitals (excluding, after 1971, hospital units of institutions) whose facilities and services are available to the public. Table 6 shows historical expense data for community hospitals from the AHA's National Hospital Panel Survey. The Survey is a monthly survey of a randomly selected sample of about 1,800 of the approximately 5,800 community hospitals.

The total expenses of community hospitals, including expenses for both inpatient and outpatient care, were \$238.6 billion in 1991, an increase of 9.9 percent over the preceding year. The average cost of a day of hospital care was \$844 in 1991, representing an increase of 10.3 percent. The increase in hospital costs per admission, or "cost per case," was 8.8 percent, rising to \$5,460 in 1991 (see table 6).

Table 6 displays, for measures of hospital expense, data for the years 1965 to 1992. The rate of growth in hospital expenses exceeded the rate of inflation, as measured by the CPI, in most years. Until recently, changes in the rate of growth in hospital expenses followed changes in inflation. For example, the medical care component of the CPI and the rates of growth in the adjusted expenses per inpatient day and per admission were all relatively low during the Economic Stabilization Program (August 1971 through 1974). Also, the rates of increase of all four measures of community hospital expenses followed the CPI downward between 1981 and 1984. However, since 1984, hospital expenses have continued to go up, even as inflation has slowed. (A short-term downward trend in the growth rate of hospital expenses which is not reflected in the CPI indexes is evident in the 1976 to 1979 interval. Some analysts have argued that this was due perhaps in part to the initiation in 1978 of a "voluntary effort" to reduce health care costs initiated by the American Hospital Association and other health organizations.)

TABLE 6.—SELECTED COMMUNITY HOSPITAL EXPENSES DATA, TOTALS AND PERCENTAGE INCREASES, 1965–92

Year	Total expenses		Adjusted ¹ expenses per inpatient day		Adjusted expenses per admission		Inpatient expenses ²	
	Amount (billions)	Percent change					Amount (billions)	Percent change
			Amount	Percent change	Amount	Percent change		
1965.....	\$9.220	8.6	\$41	7.5	\$315	8.1	\$8.414	8.7
1966.....	10.497	13.8	46	12.2	356	13.0	9.611	14.2
1967.....	12.624	20.3	53	15.2	425	19.4	11.551	20.2
1968.....	14.720	16.6	59	11.3	482	13.4	13.371	15.8
1969.....	17.247	17.2	68	15.2	551	14.3	15.635	16.9
1970.....	20.261	17.5	78	14.7	608	10.3	18.328	17.2
1971.....	22.496	11.0	87	11.5	670	10.2	20.269	10.6
1972.....	25.223	12.1	96	10.3	729	8.8	22.622	11.6
1973.....	28.248	12.0	105	9.4	784	7.5	25.173	11.3
1974.....	32.759	16.0	118	12.4	873	11.4	29.077	15.5
1975.....	38.492	17.5	138	16.9	1,017	16.5	33.971	16.8
1976.....	45.842	19.1	158	14.5	1,168	14.8	40.321	18.7
1977.....	53.006	15.6	181	14.5	1,312	12.3	46.437	15.2
1978.....	59.802	12.8	203	12.2	1,466	11.7	52.131	12.3
1979.....	67.833	13.4	226	11.3	1,618	10.4	59.060	13.3
1980.....	79.340	17.0	256	13.3	1,836	13.5	68.962	16.8
1981.....	94.187	18.7	299	16.8	2,155	17.4	81.651	18.4
1982.....	109.091	15.8	348	16.4	2,489	15.5	94.346	15.5
1983.....	120.220	10.2	391	12.5	2,742	10.2	103.403	9.5
1984.....	126.028	4.6	443	13.3	2,947	7.5	107.000	3.2
1985.....	134.043	6.6	493	11.2	3,226	9.4	111.402	4.4
1986.....	146.032	8.9	535	8.6	3,527	9.3	119.281	7.1
1987.....	161.322	10.5	581	8.6	3,860	9.5	129.300	8.4
1988.....	177.770	10.2	632	8.8	4,194	8.6	140.482	8.2
1989.....	195.377	9.9	690	9.3	4,586	9.3	152.147	8.3
1990.....	217.113	11.1	765	10.7	5,021	9.5	165.792	9.0
1991.....	238.633	9.9	844	10.3	5,460	8.8	178.401	7.6
1992 ³	261.292	9.5	927	9.8	5,904	8.1	191.740	7.5

¹ Adjusted to account for the volume of outpatient visits.² Based on ratio of inpatient to total patient revenues applied to total expenses.³ Estimate based on January through November 1992 compared with January through November 1991.

Note.—Percentage changes may not correspond to published data because of rounding.

Source: National Hospital Panel Survey, American Hospital Association.

A variety of factors other than overall inflation contribute to aggregate changes in hospital expenses, including: population growth, aging of the population, which affects admission rates, inflation over and above general inflation in the prices of goods and services purchased by the hospitals (input factor prices), and changes in the type and mix (intensity) of services rendered due to such factors as changes in the use of technology or treatment patterns. Arnett et

al. (Health Care Financing Review, spring 1986) estimated that over 51 percent of the overall growth in inpatient hospital expenses between 1974 and 1984 was due to overall inflation, approximately 7.3 percent to population growth, 16.6 percent to excess inflation in hospital prices, and 33.4 percent to intensity of services per day.

Expenditures for hospital care are financed primarily by third parties (see table 7). In 1991, private health insurers paid 35.2 percent of the total, Medicare and Medicaid paid 40.4 percent, and other government programs paid 15.9 percent. The amount financed out-of-pocket by consumers was an estimated 3.4 percent.

Table 7 also shows that the Medicare share of spending dropped steadily from 1985 to 1989, the first such decreases since the early 1970s. HCFA attributed this decline to the relatively low growth in Medicare payments per hospital admission. Medicare's share in 1990 was the same as in 1989.

TRENDS IN HOSPITAL UTILIZATION

Admissions

From 1978 to 1983, total admissions increased at an annual rate of 1.1 percent, and admissions for persons age 65 and over increased an average of 4.8 percent per year (see table 8). With the introduction of Medicare's prospective payment system (PPS), admissions of patients 65 and older declined sharply, contrary to most expectations. Admissions of younger patients, however, had been decreasing for several years before that. Between 1987 and 1992, total admissions continued to decrease, but at a slower rate, due to an increase among the older population. Even among this group, however, admissions have not returned to pre-PPS levels.

Average length of stay

Before the implementation of PPS, average length of stay (LOS) for all adults was relatively constant, at between 7.0 and 7.2 days (see table 9). With the introduction of PPS, there was a significant drop in LOS. From 1982 to 1984, LOS dropped by 6.9 percent for all adults and 10.9 percent for adults age 65 and over. LOS stabilized at this level throughout the rest of the 1980s, although there has been a slight decrease in LOS since 1990.

Hospital occupancy

With slight increases in admissions and stable LOS, occupancy rates averaged around 75 percent in the early 1980s (see table 10). The number of hospital beds was increasing, exceeding 1 million by 1983. During the early years of PPS, however, occupancy rates decreased dramatically. From 1983 to 1986, the average occupancy rate fell from 72.2 percent to 63.4 percent. There was a slight increase in occupancy rates in the late 1980s, but by 1992 the average occupancy rate had fallen to 62.4 percent. This occurred despite a decline in the number of beds beginning in 1984, with the total falling to just over 900,000 by 1991.

Hospital employment

Hospitals experienced a significant downturn in total employment levels at the time PPS was introduced (see table 11). During

1984 and 1985, total hospital FTEs declined 2.3 percent. Between 1986 and 1990, however, total hospital employment consistently increased. Much of this growth may be attributed to increased employment in the outpatient area. During the late 1980s, growth in the number of part-time personnel exceeded growth in the number of full-time personnel in every year. In 1992 the number of full-time personnel grew faster than the number of part-time personnel for the first time in at least 15 years.

TABLE 7.—EXPENDITURES FOR HOSPITAL CARE, BY SOURCE OF FUNDS, 1980, 1985, 1989, AND 1988-91

[Amounts in billions]

Source of payment	1980		1985		1988		1989		1990		1991	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Total.....	\$102.4	100.0	\$168.3	100.0	\$212.0	100.0	\$232.4	100.0	\$258.1	100.0	\$288.6	100.0
Out of pocket.....	5.3	5.2	8.8	5.2	10.4	4.9	10.8	4.7	10.3	4.0	9.9	3.4
Third-party payments.....	97.1	94.8	159.5	94.8	201.6	95.1	221.6	95.3	247.7	96.0	278.7	96.6
Private health insurance.....	37.5	36.6	59.6	35.4	76.2	36.0	84.3	36.3	94.3	36.6	101.5	35.2
Other private funds.....	5.0	4.9	8.3	4.9	11.1	5.3	12.6	5.4	13.9	5.4	14.7	5.1
Government.....	54.6	53.3	91.6	54.4	114.3	53.9	124.7	53.7	139.5	54.0	162.6	56.3
Federal.....	41.3	40.4	71.8	42.7	86.2	40.6	94.0	40.4	104.0	40.3	119.1	41.3
Medicare.....	26.4	25.8	48.6	28.9	57.5	27.1	62.5	26.9	67.4	26.1	73.3	25.4
Medicaid ¹	5.3	5.2	8.4	5.0	11.2	5.3	13.0	5.6	16.3	6.3	23.9	8.3
Other Federal programs.....	9.7	9.4	14.8	8.8	17.5	8.3	18.5	8.0	20.3	7.8	21.9	7.6
State and local.....	13.3	12.9	19.7	11.7	28.1	13.2	30.7	13.2	35.5	13.7	43.5	15.1
Medicaid ²	4.4	4.3	7.1	4.2	8.8	4.2	9.9	4.3	12.6	4.9	19.4	6.7
Other State and local programs.....	8.9	8.7	12.7	7.5	19.3	9.1	20.8	8.9	22.9	8.9	24.0	8.3

¹ Federal share only.² State and local share only.

Note.—Numbers may not add to totals because of rounding.

Source: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

TABLE 8.—CHANGE IN AVERAGE LENGTH OF STAY, ALL ADULTS AND ADULTS AGE 65 AND OVER, 1978–92

Year	All adults length of stay	Percent change	Age 65 and over	Percent change
1978.....	7.2	—0.3	10.6	—1.2
1979.....	7.1	—1.1	10.4	—1.9
1980.....	7.2	.6	10.4	—1.1
1981.....	7.2	.4	10.4	—1.1
1982.....	7.2	—7	10.1	—2.3
1983.....	7.0	—2.0	9.7	—4.4
1984.....	6.7	—5.1	9.0	—7.5
1985.....	6.6	—1.7	8.8	—2.1
1986.....	6.6	.6	8.8	.4
1987.....	6.6	.8	8.9	1.0
1988.....	6.6	0	8.8	—7
1989.....	6.6	0	8.8	0
1990.....	6.6	0	8.7	—1.1
1991.....	6.5	—1.5	8.5	—2.3
1992 ¹	6.4	—1.5	8.4	—1.2
Average annual change:				
1978–1983.....		—5		—1.7
1984–1992.....		—9		—1.5

¹ Estimate based on January through November 1992 compared with January through November 1991.

Source: American Hospital Association National Panel Survey.

TABLE 9.—PERCENT CHANGE IN HOSPITAL ADMISSIONS, 1978–92

Year	Admissions		
	All	Under age 65	Age 65 and over
1978.....	0.4	—1.0	4.9
1979.....	2.7	1.7	5.3
1980.....	2.9	1.5	6.7
1981.....	.9	0	3.0
1982.....	0	—1.6	4.1
1983.....	—5	—2.8	4.7
1984.....	—3.7	—4.2	—2.6
1985.....	—4.9	—4.7	—5.2
1986.....	—2.1	—2.5	—1.0
1987.....	—6	—1.0	.4
1988.....	—4	—1.6	2.0
1989.....	—1.1	—2.0	1.2
1990.....	—5	—1.6	1.7
1991.....	—1.1	—2.9	2.5
1992 ¹	—6	—2.1	2.2
Average annual change:			
1978–83.....	1.1	—4	4.8
1984–92.....	—1.7	—2.5	—1

¹ Estimate based on January through November 1992 compares with January through November 1991.

Source: American Hospital Association National Panel Survey.

TABLE 10.—PERCENT CHANGE IN HOSPITAL EMPLOYMENT, 1978–92

Year	Total hospital FTE's	Personnel		
		Total	Full time	Part time
1978.....	3.7	4.1	3.3	6.8
1979.....	3.5	3.9	3.0	6.7
1980.....	4.7	5.2	4.0	9.1
1981.....	5.4	6.0	4.8	9.4
1982.....	3.7	3.7	3.6	4.1
1983.....	1.4	1.5	1.2	2.3
1984.....	—2.3	—2.1	—2.6	— .8
1985.....	—2.3	—1.8	—2.7	— .1
1986.....	.3	.4	.3	.7
1987.....	.7	.9	.4	2.3
1988.....	1.1	1.4	.7	3.3
1989.....	1.6	1.9	1.2	3.6
1990.....	2.1	2.3	1.8	3.6
1991.....	.6	.7	.6	1.0
1992 ¹	1.5	1.4	1.7	.8
Average annual change:				
1978–83.....	3.7	4.1	3.3	6.4
1984–92.....	.4	.6	.1	1.6

¹ Estimate based on November 1992 compared with January through November 1992.

Source: American Hospital Association National Hospital Panel Survey.

TABLE 11.—CHANGE IN INPATIENT HOSPITAL OCCUPANCY RATES AND NUMBER OF BEDS, 1978–92

Year	Percent		Number of beds	Percent change
	Occupancy rates	Change		
1978.....	73.8	—0.8	954,001	0.9
1979.....	74.5	.9	959,269	.6
1980.....	75.9	1.9	970,456	1.2
1981.....	75.8	—1	986,917	1.7
1982.....	74.6	—1.6	997,720	1.1
1983.....	72.2	—3.2	1,003,658	.6
1984.....	66.6	—7.8	992,616	—1.1
1985.....	63.6	—4.5	974,559	—1.8
1986.....	63.4	—3	963,133	—1.2
1987.....	64.1	1.1	954,458	—9
1988.....	64.5	.6	942,306	—1.3
1989.....	65.2	1.1	930,994	—1.2
1990.....	64.5	—1.1	921,447	—1.0
1991.....	63.5	—1.6	911,781	—1.0
1992 ¹	62.4	—1.7	908,010	—4
Annual average:				
1978–83.....		—5		1.0
1984–92.....		—1.6		—1.1

¹ Estimate based on January through November 1992.

Source: American Hospital Association National Hospital Panel Survey.

EXPENDITURES FOR PHYSICIANS' SERVICES

Personal health care expenditures for physicians' services were \$142.0 billion in 1991, an increase of 10.2 percent from the previous year (see table 12). In 1991, 18.9 percent of national health expenditures and 21.5 percent of personal health expenditures were for physicians' services (see table 1). Physicians, however, affect personal health care expenditures more than this might indicate. Physicians have considerable discretion in determining the volume of all medical services. It is estimated that physicians' decisions (such as ordering hospitalizations, drugs, laboratory tests) directly influence over 70 percent of all health care spending.

Third-party (public expenditures and private insurance) payments financed a large majority of physicians' services. In 1991, private health insurance paid \$66.8 billion (47 percent) for such services. The remainder was split between direct patient payments and public expenditures. Patients or their families paid \$25.7 billion (18 percent) for physicians' services. Public programs paid \$49.4 billion (35 percent) for such services, of which \$32.8 billion was Federal Medicare payments (see table 12).

Inflation was a major cause of growth in spending for physicians' services. Physicians' fees have risen more rapidly (6.3 percent in

1992) than prices in the economy as a whole (3.0 percent) as measured by the Consumer Price Index (CPI) (see table 13).

An analysis done by the Health Care Financing Administration found that expenditures for physicians' services over a 10-year span increased from \$41.9 billion in 1980 to \$142.0 billion in 1991, an average annual growth rate of 11.7 percent.

The average physician net income in 1990, after expenses but before taxes, was \$164,300, a 5.5 percent increase over the previous year (see table 14). Surgeons had the highest average net incomes in 1990 (\$236,400) and general and family practitioners the lowest (\$102,700). In 1990, the average net income of anesthesiologists increased faster than any other specialty (11.6 percent).

By region, average net income growth varied greatly, ranging from -4.9 percent in West North Central to 19.8 percent in the Mountain region. Physicians in the East North Central and West South Central regions had the highest average net incomes (\$172,400 and \$178,800 respectively). Physicians in the New England region had the lowest average net incomes (\$142,500). The growth rates differed rather significantly between metropolitan and nonmetropolitan areas, as shown in table 14. The average net incomes of self-employed physicians (\$185,600) continued to be higher than those of employee physicians (\$119,800).

Table 15 shows average physician net incomes in nominal and real (or constant) dollars. Real income is expressed in 1990 dollars. Physicians' average net income increased about 172 percent between 1977 and 1990. However, average real incomes increased about 26 percent during this period, at an average annual rate of 1.8 percent.

Table 16 shows physicians' median net incomes by specialty. From 1981 to 1990, nominal net income increased in all specialties. Table 17 shows the distribution of physicians' net incomes in 1990 for all physicians and selected specialties. While the average net income of all physicians was \$164,300, half of all physicians earned less than \$130,000. One-fourth of all physicians earned less than \$90,000, while one-fourth earned more than \$200,000. Average net income was higher than median net income for all specialties. Anesthesiologists, radiologists, and surgeons had the highest median incomes, with half earning more than \$200,000.

The continuing survey of physicians' incomes conducted by the magazine *Medical Economics* showed that, on average, physicians received 79 percent of their 1989 gross practice incomes from third parties (see table 18). On average, 20 percent came from commercial insurers, 15 percent from Blue Shield, 23 percent from Medicare, 9 percent from health maintenance organizations (HMOs) and independent practice associations (IPAs), and 5 percent from preferred provider organizations (PPOs). As table 18 indicates, the importance of each source of payment varied by specialty. Thoracic surgeons received the highest percentage of gross pay from Medicare (49 percent), while pediatricians, on average, received only 1 percent of their gross income from Medicare.

TABLE 12.—EXPENDITURES FOR PHYSICIAN SERVICES¹ BY SOURCE OF FUNDS, 1980, 1985, 1987, 1988, 1989, AND 1987-91

	1980		1985		1987		1988		1989		1990		1991	
	Amount	Per- cent	Amount	Per- cent	Amount	Per- cent	Amount	Per- cent	Amount	Per- cent	Amount	Per- cent	Amount	Per- cent
Total.....	\$41.9	100.0	\$74.0	100.0	\$93.0	100	\$105.1	100.0	116.1	100.0	128.8	100.0	142.0	100.0
Out-of-pocket payments	11.3	26.9	16.1	21.8	19.0	20.4	20.9	19.9	22.5	19.4	24.1	18.7	25.7	18.1
Third-party payments	30.6	73.1	57.8	78.2	74.0	79.6	84.3	80.1	93.6	80.6	104.8	81.3	116.3	81.9
Private health insurance	18.0	42.9	33.7	45.6	42.6	45.8	49.1	46.7	53.9	46.4	60.7	47.1	66.8	47.0
Other private funds	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Government	12.6	30.2	24.1	32.6	31.4	33.8	35.1	33.4	39.6	34.1	44.0	34.2	49.4	34.8
Federal	9.7	23.1	19.2	26.0	25.1	27.0	28.1	26.7	31.7	27.3	34.9	27.1	39.0	27.5
Medicare	7.9	19.0	16.7	22.5	21.7	23.3	24.2	23.0	27.4	23.6	29.7	23.1	32.8	23.1
Medicaid	1.2	2.8	1.6	2.2	2.0	2.2	2.2	2.1	2.5	2.2	3.1	2.4	4.0	2.8
Other Federal programs .....	.5	1.3	1.0	1.3	1.4	1.5	1.7	1.6	1.8	1.5	2.0	1.6	2.2	1.6
State and local	3.0	7.1	4.9	6.6	6.3	6.8	7.0	6.7	7.9	6.8	9.1	7.1	10.4	7.3
Medicaid	1.0	2.3	1.2	1.7	1.5	1.7	1.5	1.5	1.7	1.5	2.1	1.7	2.9	2.0
Other State and local programs	2.0	4.8	3.6	4.9	4.8	5.1	5.5	5.2	6.2	5.3	7.0	5.4	7.5	5.3

¹ Encompasses the cost of all services and supplies provided in physicians' offices, the cost for services of private practitioners in hospitals and other institutions, and the cost of diagnostic work performed in independent clinical laboratories. The salaries of staff physicians are counted with expenditures for the services of the employing institution.

² Less than \$50 million.

Note: Numbers may not add to totals due to rounding.

Source: Health Care Financing Administration: Office of the Actuary: Data from the Office of National Health Statistics.

TABLE 13.—ANNUALIZED RATES OF CHANGE IN THE CONSUMER PRICE INDEX (CPI-U),¹
1965-92

	CPI all items	CPI, all items less medical care	Medical care total	Physicians' services
1965.....	1.7	1.5	2.5	3.6
1966.....	2.9	3.0	4.4	5.8
1967.....	2.9	2.4	7.1	7.1
1968.....	4.2	4.1	6.1	5.6
1969.....	5.4	5.4	6.9	6.9
1970.....	5.9	5.8	6.3	7.5
1971.....	4.3	4.1	6.5	6.9
1972.....	3.3	3.3	3.2	3.1
1973.....	6.2	6.4	3.9	3.3
1974.....	11.0	11.1	9.3	9.2
1975.....	9.1	8.9	12.0	12.3
1976.....	5.8	5.5	9.5	11.3
1977.....	6.5	6.2	9.6	9.3
1978.....	7.7	7.6	8.4	8.3
1979.....	11.3	11.4	9.3	9.2
1980.....	13.5	13.6	10.9	10.6
1981.....	10.4	10.3	10.8	11.0
1982.....	6.1	5.9	11.6	9.4
1983.....	3.2	2.9	8.7	7.7
1984.....	4.3	4.1	6.2	7.0
1985.....	3.8	3.6	6.7	6.9
1986.....	1.9	1.5	7.5	7.2
1987.....	3.7	3.5	6.6	7.3
1988.....	4.1	3.9	6.5	7.2
1989.....	4.8	4.6	7.7	7.4
1990.....	5.4	5.2	9.0	7.1
1991.....	4.2	3.9	8.7	6.0
1992.....	3.0	2.8	7.4	6.3

¹ CPI index for all urban consumers, unadjusted figures.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index.

TABLE 14.—PHYSICIANS' AVERAGE NET INCOME AFTER EXPENSES BUT BEFORE TAXES, SURVEY RESULTS, 1983-90

	Average net income ¹ (in thousands of dollars)							Percent change 1989-90	
	1983	1984	1985	1986	1987	1988	1989		
All physicians ²	104.1	108.4	112.2	119.5	132.3	144.7	155.8	164.3	5.5
Specialty:									
General/family practice	68.5	71.1	77.9	80.3	91.5	94.6	95.9	102.7	7.1
Internal medicine	93.3	103.2	101.0	109.4	121.8	130.9	146.5	152.5	4.1
Surgery	145.5	151.8	155.4	162.4	187.9	207.5	220.5	236.4	7.2
Pediatrics	70.7	74.5	77.1	81.8	85.3	94.9	104.7	106.5	1.7
Obstetrics/ gynecology	119.9	116.2	122.7	135.9	163.2	180.7	194.3	207.3	6.7
Radiology	148.0	139.8	150.8	168.8	180.7	188.5	210.5	219.4	4.2
Psychiatry	80.0	85.5	88.6	91.5	102.7	111.4	111.7	116.5	4.3
Anesthesiology	144.7	145.4	140.2	150.2	163.1	194.5	185.8	207.4	11.6
Census Division:									
New England	84.5	87.3	108.3	107.1	110.6	132.9	128.3	142.5	11.1
Middle Atlantic	98.6	98.4	107.9	114.6	126.1	135.0	152.5	156.1	2.4
East North Central	114.3	109.4	118.9	126.6	137.6	147.0	155.6	172.4	10.8
West North Central	110.5	110.7	113.7	120.7	133.9	138.0	159.2	151.4	-4.9
South Atlantic	106.7	114.5	112.6	119.6	133.8	156.0	165.6	169.0	2.1
East South Central	114.9	122.2	115.0	122.6	141.2	164.8	173.0	169.0	2.3
West South Central	124.4	119.1	123.3	129.0	140.4	160.7	170.5	178.8	4.9
Mountain	91.4	102.3	97.5	108.5	125.5	132.1	142.6	170.9	19.8
Pacific	103.1	109.4	113.6	119.0	135.4	136.0	148.1	162.5	9.7

TABLE 14.—PHYSICIANS' AVERAGE NET INCOME AFTER EXPENSES BUT BEFORE TAXES, SURVEY RESULTS, 1983-90—Continued

	Average net income ¹ (in thousands of dollars)							Percent change 1989-90
	1983	1984	1985	1986	1987	1988	1989	1990
Location:								
Nonmetropolitan	87.2	90.9	94.2	107.7	117.9	120.9	129.4	130.5
Metropolitan:								
Less than 1,000,000	111.0	115.1	118.1	124.5	140.4	154.1	164.1	172.7
1,000,000 and over	106.3	106.4	112.8	117.5	127.9	140.7	153.4	163.3
Employment Status:								
Self-employed	115.9	118.6	124.5	131.1	146.2	160.0	175.3	185.6
Employee	77.6	80.4	83.8	91.7	99.6	113.0	119.2	119.8
								.85
								5.2
								6.5
								5.9
								.50

¹ Average net income after expenses but before taxes. These figures include contributions made into pension, profit-sharing, and deferred compensation plans.² Includes physicians in specialties not reported separately.

Source: Socioeconomic Characteristics of Medical Practice, 1992, American Medical Association.

TABLE 15.—AVERAGE PHYSICIAN NET INCOME AFTER EXPENSES, BEFORE TAXES, 1977–90

[Dollars in thousands]

	Nominal	Real (1990)
1977	\$60.4	\$130.3
1978	64.6	129.5
1979	77.4	139.5
1980	NA	NA
1981	89.9	129.3
1982	97.7	132.3
1983	104.1	136.6
1984	108.4	136.4
1985	112.2	136.3
1986	119.5	142.5
1987	132.3	152.2
1988	144.7	159.9
1989	155.8	164.2
1990	164.3	164.3

NA: Not available.

Note.—No data for 1980. Real (1990 dollars) incomes are calculated using the consumer price index for all urban consumers.

Source: CRS analysis of data from: Gonzales, Martin L., and David W. Emmons, eds., "Socioeconomic Characteristics of Medical Practice, 1992," American Medical Association.

TABLE 16.—MEDIAN PHYSICIAN NET INCOME AFTER EXPENSES, BEFORE TAXES, 1981 AND 1990

[Dollars in thousands]

	Median net income			Average annual percent change	
	1981	1990 nominal	1990 real ¹	Nominal	Real
All physicians ²	\$75	\$130	\$90	6.3	2.1
Specialty:					
General/family practice	60	93	65	5.0	.8
Internal medicine	72	120	83	5.8	1.7
Surgery	100	200	139	8.0	3.7
Pediatrics	55	100	70	6.9	2.6
Obstetrics/gynecology	96	184	128	7.5	3.2
Radiology	105	200	139	7.4	3.2
Psychiatry	64	107	74	5.9	1.7
Anesthesiology	105	200	139	7.4	3.2
Pathology	75	150	104	8.0	3.7
Census Division:					
New England	65	120	83	7.0	2.8
Middle Atlantic	70	125	87	6.7	2.4
East North Central	80	140	97	6.4	2.2
West North Central	80	130	90	5.5	1.4
South Atlantic	77	133	92	6.3	2.1
East South Central	80	140	97	6.4	2.2
West South Central	80	150	104	7.2	3.0
Mountain	74	135	94	6.9	2.7
Pacific	77	135	94	6.4	2.2

¹ In 1981 dollars.² Includes physicians in specialties not listed separately.

Source: Gonzalez, Martin L., and David W. Emmons, eds. "Socioeconomic Characteristics of Medical Practice, 1992," American Medical Association.

TABLE 17.—DISTRIBUTION OF PHYSICIAN NET INCOME AFTER EXPENSES, BEFORE TAXES,
BY SPECIALTY AND CENSUS DIVISION, 1990

[In thousands of dollars]

	125th Percentile	150th Percentile	175th Percentile	Mean
All physicians ¹	90	130	200	164.3
Specialty:				
General/family practice	65	93	125	102.7
Internal medicine	82	120	180	152.5
Surgery	135	200	300	236.4
Pediatrics	70	100	130	106.5
Obstetrics/gynecology	125	184	260	207.3
Radiology	130	200	275	219.4
Psychiatry	80	107	138	116.5
Anesthesiology	150	200	250	207.4
Pathology	107	150	225	172.5
Census division:				
New England	90	120	170	142.5
Middle Atlantic	88	125	200	156.1
East North Central	93	140	200	172.4
West North Central	90	130	193	151.4
South Atlantic	90	133	208	169.0
East South Central	92	140	230	169.0
West South Central	90	150	230	178.8
Mountain	85	135	210	170.9
Pacific	90	135	200	162.5

¹ Includes physicians in specialties not listed separately.

Source: Gonzalez, Martin L., and David W. Emmons, eds. "Socioeconomic Characteristics of Medical Practice, 1992." American Medical Association.

TABLE 18.—THIRD PARTY SOURCES OF PHYSICIAN PAYMENT FOR SELECTED SPECIALTIES, 1989

Specialty	Commercial plans			Blue Shield			Medicare			Medicaid			HMOs/IPAs			PPOs		
	Average annual payment	As percent of gross practice income		Average annual payment	As percent of gross practice income		Average annual payment	As percent of gross practice income		Average annual payment	As percent of gross practice income		Average annual payment	As percent of gross practice income		Average annual payment	As percent of gross practice income	
Family practice.....	\$25,230	16		\$20,200	12		\$35,000	22		\$13,710	9		\$16,350	11		\$7,860	5	
General practice.....	22,630	13		16,060	12		32,160	23		12,120	11		11,130	8		7,110	5	
General surgeons.....	46,550	22		39,380	18		69,890	33		17,960	9		15,230	7		8,840	4	
Pediatricians.....	27,150	16		20,920	13		970	1		16,530	11		23,450	15		12,580	7	
Plastic surgeons.....	76,770	23		51,690	16		38,850	12		9,270	3		15,820	5		12,740	4	
Psychiatrists.....	29,540	21		16,730	13		12,440	9		5,030	5		5,990	4		5,520	4	
Internists.....	24,610	14		25,380	15		64,870	37		6,680	5		13,310	8		6,580	4	
Neurosurgeons.....	107,100	30		61,940	18		65,670	20		19,860	7		26,370	8		16,420	4	
OBG specialists.....	93,060	30		61,000	21		12,680	5		21,300	8		30,520	12		22,640	7	
Ophthalmologists.....	36,550	11		30,660	10		140,830	45		10,060	4		24,300	7		8,300	3	
Orthopedists.....	92,820	27		54,930	17		67,590	27		14,820	4		22,890	7		14,410	4	
Thoracic surgeons.....	41,580	15		45,190	15		139,660	49		18,680	7		20,680	6		8,620	3	
All surgical specialists.....	68,300	25		46,150	17		54,860	21		17,680	7		23,980	9		14,000	5	
All non-surgical specialists.....	33,630	18		26,930	15		45,370	24		10,250	7		14,400	8		9,150	5	
All M.D.s.....	45,010	20		32,200	15		47,000	23		13,550	7		17,560	9		10,450	5	

Source: Azevedo, David, "Which Third Parties Pay You the Most?" Medical Economics, Nov. 26, 1990.

SUPPLY OF HOSPITAL BEDS

The national supply of community hospital beds per 1,000 population steadily increased from the 1940's, reaching a peak of 4.6 beds per 1,000 population in 1975. By 1989, the number of beds had dropped to 3.8 per 1,000 population. Similar trends can be seen in the nine census regions, except for New England, which has seen a reduction since 1940 from 4.4 beds to 3.5 beds per 1,000 population in 1989, and the Pacific region, where the reduction has been from 4.1 beds in 1940 to 2.8 beds in 1989. The area experiencing the largest increase has been the East South Central, where beds increased from 1.7 per 1,000 population in 1940 to 5.1 in 1980, falling back to 4.7 in 1989. (see table 19).

TABLE 19.—COMMUNITY HOSPITAL BEDS PER 1,000 POPULATION,¹ ACCORDING TO GEOGRAPHIC DIVISION: UNITED STATES, SELECTED YEARS 1940–89

[Data are based on reporting by facilities]

Geographic division	Year								
	1940 ²	1950 ²	1960 ³	1970	1975	1980	1986	1988	1989
United States	3.2	3.3	3.6	4.3	4.6	4.5	4.1	3.9	3.8
New England.....	4.4	4.2	3.9	4.1	4.2	4.1	3.8	3.6	3.5
Middle Atlantic.....	3.9	3.8	4.0	4.4	4.6	4.6	4.3	4.1	4.1
East North Central	3.2	3.2	3.6	4.4	4.7	4.7	4.3	4.1	4.0
West North Central	3.1	3.7	4.3	5.7	5.8	5.8	5.3	5.1	4.9
South Atlantic	2.5	2.8	3.3	4.0	4.3	4.5	4.0	3.8	3.7
East South Central	1.7	2.1	3.0	4.4	4.9	5.1	5.0	4.7	4.7
West South Central	2.1	2.7	3.3	4.3	4.7	4.7	4.0	3.9	3.8
Mountain.....	3.6	3.8	3.5	4.3	4.0	3.8	3.4	3.3	3.1
Pacific.....	4.1	3.2	3.1	3.7	3.9	3.5	3.1	2.9	2.8

¹ Civilian population.

² 1940 and 1950 data are estimated based on published figures.

³ 1960 includes hospital units of institutions.

Note: Hospitals include all non-Federal short-stay hospitals classified by the American Hospital Association according to one of the following services: general medical and surgical; obstetrics and gynecology; eye, ear, nose, and throat, rehabilitation; orthopedic; other specialty; children's general; children's eye, ear, nose, and throat; children's rehabilitation; children's orthopedic; and children's other specialty.

Source: Health, United States, 1991. U.S. Department of Health and Human Services. DHHS Publication No. (PHS) 92-1232, Table 108, pp. 258-259.

SUPPLY OF PHYSICIANS

Physician supply has grown rapidly over the past three decades. The number of active physicians in the country has increased from 334,028 in 1970 to 653,062 in 1992. This growth rate exceeded the rate at which the population of the Nation grew during the decade.

Table 20 indicates that between 1965 and 1990, the number of nonfederal physicians per 100,000 civilians grew from 161 to 244. As table 21 below indicates, the ratio of physicians-to-population increased from 148 physicians per 100,000 population in 1970 to 248

physicians per 100,000 population in 1992. This table also indicates variations in the supply of physicians relative to population by State. In 1992, the District of Columbia had the highest ratio (705 physicians per 100,000 population) while Mississippi had the lowest ratio (149 physicians per 100,000 population).

TABLE 20.—PHYSICAL SUPPLY BY MAJOR CATEGORIES, 1970–90

Category	1970		1980		1990	
	Number	Percent	Number	Percent	Number	Percent
Total Physicians.....	334,028	.....	467,679	.....	615,421	.....
Federal	29,501	9	17,787	4	20,475	3
Nonfederal	301,323	91	443,502	96	592,166	97
Patient Care	278,535	90	376,512	91	503,870	92
Nonpatient Care.....	32,310	10	38,404	9	43,440	8
Male.....	308,627	92	413,395	88	511,227	83
Female	25,401	8	54,284	12	104,194	17
International medical graduates.....	57,217	17	97,726	21	131,764	21
Metropolitan (nonfederal only) ...	258,265	86	385,365	87	521,668	88
Nonmetropolitan (nonfederal only) ...	43,058	14	58,137	13	70,498	12
Nonfederal physician-population ratio (per 100,000 persons)	161	.....	202	.....	244	.....

Source: American Medical Association, 1992.

TABLE 21.—NON-FEDERAL PHYSICIAN/POPULATION RATIOS AND RANK BY STATE

[Ratios: Non-Federal physicians (M.D.'s) per 100,000 civilian population]

State	1970	1975	1985	1990	1992	1992 rank
United States ¹	148	169	220	237	248	
Alabama	90	103	152	170	183	42
Alaska	74	95	137	155	146	52
Arizona	144	185	220	233	233	20
Arkansas	92	103	150	165	179	44
California	194	219	266	272	273	11
Colorado	178	186	216	232	245	16
Connecticut	192	224	302	332	346	5
Delaware	134	155	203	217	228	21
District of Columbia.....	390	467	607	658	705	1
Florida	155	185	236	251	257	12
Georgia	108	126	172	187	196	37
Hawaii	160	185	239	266	283	9
Idaho	94	104	133	142	150	50
Illinois	138	164	217	229	247	15
Indiana	102	116	156	171	181	43
Iowa	103	113	149	167	175	45
Kansas	118	137	179	195	203	32
Kentucky	102	122	162	181	195	38
Louisiana	120	131	187	200	215	29
Maine	111	133	193	208	218	27
Maryland	183	217	334	360	374	3
Massachusetts.....	207	237	331	364	380	2
Michigan	125	145	190	201	212	30
Minnesota	151	172	223	240	255	13
Mississippi	84	94	126	144	149	51
Missouri	129	148	195	209	223	24
Montana	104	116	155	181	192	40
Nebraska	116	134	170	185	202	34
Nevada	114	129	173	175	166	48
New Hampshire	140	162	207	227	238	18
New Jersey	146	174	243	267	284	8
New Mexico	113	130	184	206	218	26
New York	236	258	318	339	360	4
North Carolina	111	132	185	209	221	25
North Dakota	96	106	168	184	202	33
Ohio	133	147	199	213	226	23
Oklahoma	103	113	149	160	168	47
Oregon	144	171	215	233	243	17

TABLE 21.—NON-FEDERAL PHYSICIAN/POPULATION RATIOS AND RANK BY STATE—
Continued

[Ratios: Non-Federal physicians (M.D.'s) per 100,000 civilian population]

State	1970	1975	1985	1990	1992	1992 rank
Pennsylvania	152	169	234	256	275	10
Rhode Island.....	160	194	248	277	294	7
South Carolina.....	93	114	161	177	181	41
South Dakota	81	90	143	154	170	46
Tennessee.....	119	139	189	210	227	22
Texas.....	117	135	174	188	196	36
Utah.....	138	155	185	200	208	31
Vermont	187	207	268	288	301	6
Virginia.....	125	149	214	233	238	18
Washington.....	149	168	223	241	251	14
West Virginia.....	104	124	171	183	195	39
Wisconsin.....	120	137	188	207	216	29
Wyoming.....	101	108	140	156	158	49

¹ Excludes counts of physicians in U.S. possessions and with unknown addresses.

Source: American Medical Association, Physician Characteristics and Distribution in the U.S. 1993 edition. Table A-20.

The number of physicians in the United States is expected to continue to grow at a faster rate than the general population. According to the American Medical Association, there were 248 active physicians per 100,000 population in 1992. The Department of Health and Human Services projects ratios of 271 in 2000 and 291 in 2020.

Supply has been growing most rapidly among internal medicine subspecialties such as cardiology and gastroenterology.

The percentage of physicians trained in primary care fields is declining. In 1990, only about 34 percent of physicians were in primary care specialties, defined as general and family practice, internal medicine, and pediatrics. This represents a decrease from 43 percent in 1965.

Currently, there are approximately 86,000 residents in training. Growth in the number of residencies over the past twenty years reflects both steep increases in the number of first-year positions during the late 1970s and the increased length of training in many specialties. The number of U.S. medical school graduates, which rose rapidly in the late 1960s and early 1970s, has been relatively stable over the past decade (see table 23).

Since the late 1970s, efforts to restrict the flow of international medical graduates (IMGs) have included stricter immigration laws and more rigorous competency requirements. As a result, table 24 shows that IMGs dropped from over 40 percent of all residents in 1971 to about 17 percent in 1985. Since then, the percentage of IMGs has risen slightly to 20 percent.

TABLE 22.—PHYSICIAN SUPPLY FOR SELECTED SPECIALTIES, 1965–1990

Specialty ¹	1965	1970	1975	1980	1985	1990	Percent growth 1965–90
Primary care:							
Family practice.....	(²)	(²)	12,183	27,530	40,021	47,639	(²)
General practice.....	71,366	57,948	42,374	32,519	27,030	22,841	³ 68
Internal medicine.....	38,690	41,872	54,331	71,531	88,862	98,349	154
Pediatrics.....	15,665	17,941	21,746	28,342	36,026	40,893	161
Internal medicine subspecialties:							
Allergy/immunology.....	910	1,719	1,716	1,518	3,060	3,388	272
Cardiovascular diseases.....	1,901	6,476	6,933	9,823	13,224	15,862	734
Gastroenterology.....	633	2,010	2,381	4,046	5,917	7,493	1083
Neurology.....	2,174	3,074	4,131	5,685	7,776	9,237	325
Pulmonary diseases.....	1,226	2,315	2,335	3,715	5,083	6,080	396
Surgical specialties:							
Dermatology.....	3,538	4,003	4,661	5,660	6,582	7,557	114
General surgery.....	27,693	29,761	31,562	34,034	38,169	38,376	39
Obstetrics/gynecology.....	16,833	18,876	21,731	26,305	30,867	33,697	100
Ophthalmology.....	8,397	9,927	11,129	12,974	14,881	16,073	91
Orthopedic surgery.....	7,549	9,620	11,379	13,996	17,166	19,138	154
Otolaryngology.....	5,325	5,409	5,745	6,553	7,267	8,138	53
Plastic surgery.....	1,133	1,600	2,236	2,980	3,951	4,590	305
Thoracic surgery.....	1,477	1,809	1,979	2,133	2,183	2,063	40
Urological surgery.....	5,045	5,795	6,667	7,743	8,836	9,372	86
Other specialties:							
Anesthesiology.....	8,644	10,860	12,861	15,958	22,021	25,981	200
Pathology.....	8,437	10,283	11,720	13,402	15,456	16,170	91
Psychiatry.....	17,888	21,146	23,992	27,481	32,255	35,163	96
Radiology ⁴	9,591	12,492	15,070	18,701	22,996	23,904	149
Total	292,088	334,028	393,742	467,679	552,716	615,421	111

¹ Specialty listings reflect 1992 self-designated practice specialty codes as described in the AMA masterfile.² Information not available.³ Negative value.⁴ Radiology includes

diagnostic, therapeutic and nuclear radiology.

Source: AMA 1992.

TABLE 23.—MEDICAL SCHOOL GRADUATES, FIRST-YEAR RESIDENTS AND TOTAL RESIDENTS, 1965–91

Year	Medical school graduates	First-year residents	Total residents
1965.....	7,409	9,670	31,898
1966.....	7,574	10,316	31,898
1967.....	7,743	10,419	33,743
1968.....	7,973	10,464	35,047
1969.....	8,059	10,808	37,139
1970.....	8,367	11,552	39,463
1971.....	8,974	12,066	42,512
1972.....	9,551	11,500	45,081
1973.....	10,391	11,031	49,082
1974.....	11,613	11,628	52,685
1975.....	12,714	13,200	54,500
1976.....	(¹)	14,258	56,872
1977.....	13,607	15,900	59,000
1978.....	14,393	16,800	63,163
1979.....	14,966	17,600	64,615
1980.....	15,135	18,702	61,465
1981.....	15,667	18,389	69,738
1982.....	15,985	18,976	69,142
1983.....	15,824	18,794	73,000
1984.....	16,327	19,539	75,125
1985.....	16,319	19,168	75,514
1986.....	16,125	18,183	76,815
1987.....	15,836	18,067	81,410
1988.....	15,887	17,941	81,093
1989.....	15,620	18,131	82,000
1990.....	15,336	18,322	82,902
1991.....	15,499	19,497	86,217

¹ Not available.

Source: JAMA Medical Education issues.

TABLE 24.—RESIDENTS BY LOCATION OF EDUCATION AND CITIZENSHIP, 1971–91

	Total	Percent of all residents	U.S. citizens	Foreign nationals
1971	17,515	41	1,063	16,452
1976	16,634	29	1,783	14,851
1981	11,596	17	2,908	8,688
1983	14,084	19	4,961	9,123
1985	12,509	17	6,868	5,609
1991	17,017	20	5,107	¹ 11,910

¹ Includes 5,845 permanent resident aliens.

Source: American Medical Association 1986 and JAMA Medical Education issues.

HEALTH INSURANCE COVERAGE

HEALTH INSURANCE STATUS IN 1990

Most people have some form of health insurance. In 1991, an estimated 85.9 percent of the total noninstitutionalized population had public or private coverage during at least part of the year. However, an estimated 35.4 million Americans, or 14.1 percent of the population, were without health insurance in 1991. All but 0.3 million of the uninsured were under age 65; consequently 15.7 percent of the nonelderly population were uninsured.

These estimates are based on an analysis of the March 1992 Current Population Survey (CPS), a household survey conducted by the Census Bureau of the Department of Commerce. Each year's March CPS asks whether individuals had coverage from selected sources of health insurance at any time during the preceding calendar year. Thus the March 1992 CPS reflects respondents' recollections of coverage during all of 1991.²

The questionnaires used in March 1988–1992 differed from those used in previous years. In addition to the standard series of questions about sources of health insurance coverage, a separate part of the survey included further health insurance questions. Some respondents reported that they had no health insurance in one part of the questionnaire and reported that they had coverage in another part. Different analyses of the CPS data have used different assumptions in reconciling these discrepancies and other potential sources of error in the survey responses. Also, the March 1988–92 surveys included responses from population groups not surveyed in earlier surveys, including retirees and other nonworking individuals.

² Some analysts have suggested that respondents may actually be reporting their coverage status at the time of the survey, rather than for the previous year.

CHARACTERISTICS OF THE UNINSURED

Some segments of the population are more likely to have health insurance coverage than others, and different groups rely to a different extent on private insurance coverage and on public programs such as Medicare and Medicaid. Tables 25-27 divide the population according to age and income and show the sources of coverage for each group.³ (The total noninstitutionalized population in 1991 was 251.4 million.)

TABLE 25.—PERCENT OF U.S. NONINSTITUTIONALIZED POPULATION OBTAINING HEALTH INSURANCE COVERAGE FROM SPECIFIED SOURCES, BY AGE, 1991

	Own job	Family member's job	Medicare	Medicaid	Other ¹	Uninsured
Age:						
Under 18.....	0.1	61.5	0.1	16.8	8.9	12.66
18 to 24	22.9	25.2	0.6	8.1	16.3	27.0
25 to 34	49.2	16.2	1.0	6.7	6.8	20.1
35 to 44	52.4	20.3	1.2	4.0	7.8	14.3
45 to 54	52.7	20.5	1.9	3.2	9.4	12.3
55 to 64	45.7	18.6	5.3	3.5	14.4	12.4
65 and over	5.1	8.9	84.4	.1	0.6	1.0
Total	28.9	29.4	11.4	7.6	8.6	14.10

¹ "Other" includes, for example, privately purchased health insurance and Department of Veterans Affairs health care services.

Source: CRS analysis of data from the March 1992 Current Population Survey.

As table 25 shows, the rate of insurance coverage is lowest among young adults; 27 percent of persons aged 18 to 24 were without coverage in 1991. Over the next several age groups, coverage rates increase, chiefly because older workers are more likely to obtain insurance through their own employment. Finally, the availability of Medicare to most individuals aged 65 and over meant that less than 1 percent of this group was uninsured.

Table 26 shows the percentage of the total uninsured population of each age group. Of the 35.4 million uninsured, 23.6 percent are children. Young adults (ages 18 to 24) total 18.6 percent and persons 25 to 34 total 24.1 percent of the uninsured.

³ About 14 percent of the population reported more than one source of coverage during the year. The dual coverages many have been either at different points during the year or simultaneous. For the purpose of these tables, CRS has assigned each individual to one primary source of coverage according to the "coordination of benefits" rules typically used by private sector insurance companies.

TABLE 26.—PERCENT OF U.S. NONINSTITUTIONALIZED POPULATION WITHOUT HEALTH INSURANCE, BY AGE, 1991

Age	Percent of the uninsured
Under 18.....	23.6
18 to 24.....	18.6
25 to 34.....	24.1
35 to 44.....	16.0
45 to 54.....	9.4
55 to 64.....	7.4
65 and over.....	.8
Total.....	100.0

Note.—Items do not sum to 100.0 due to rounding.

Source: CRS analysis of data from the March 1992 Current Population Survey.

Table 27 shows coverage rates by family income, expressed as a percentage of the Federal poverty income level. Those in the lowest income groups are least likely to have coverage. If they have coverage, the source is most likely to be Medicaid. As family income rises, both overall coverage rates and the degree of reliance on employer coverage increase.

TABLE 27.—PERCENT OF U.S. NONINSTITUTIONALIZED POPULATION OBTAINING HEALTH INSURANCE COVERAGE FROM SPECIFIED SOURCES, BY FAMILY INCOME, 1991

Income as percent of poverty	Own job	Family member's job	Medicare	Medicaid	Other ¹	Uninsured
Under 50.....	2.3	4.1	5.8	49.4	9.5	29.0
50 to 99.....	5.6	8.6	17.1	32.1	8.1	28.5
100 to 133.....	12.0	18.5	20.7	13.2	8.4	27.2
134 to 185.....	18.1	26.3	18.1	5.6	9.4	22.4
185 to 249.....	24.4	34.0	14.3	2.2	9.0	16.1
250 and over.....	40.0	35.9	8.1	0.6	8.4	7.0
Total.....	29.0	29.4	11.4	7.6	8.6	14.1

¹ "Other" includes for example, privately purchased health insurance and Department of Veterans Affairs health care services.

Note.—Rows may not sum to 100.0 due to rounding.

Source: CRS analysis of data from the March 1992 Current Population Survey.

Table 28 combines age and income and shows the percent of persons in each age/income group without health insurance. Overall, the trends shown in this table are similar to those in the previous tables: the rate of those without insurance drops with increasing age and income.

TABLE 28.—PERCENT OF THE U.S. NONINSTITUTIONALIZED POPULATION WITHOUT HEALTH INSURANCE, BY AGE AND INCOME, 1991

Income as a percent of poverty level	Under 18	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 and over
Under 50.....	17.0	42.0	39.6	45.4	46.4	46.5	7.8
50 to 99.....	24.0	43.2	40.4	43.2	39.9	26.7	1.6
100 to 133.....	25.0	45.1	41.4	36.0	35.0	29.4	0.6
134 to 185.....	20.1	38.0	30.0	29.0	29.3	27.1	0.9
185 to 249.....	13.0	30.0	22.1	18.2	23.4	16.0	0.8
250 and over.....	5.0	16.5	11.5	6.3	5.3	5.8	0.6

Source: CRS analysis of data from the March 1992 Current Population Survey.

FACTORS IN EMPLOYMENT-BASED COVERAGE

In the United States, health insurance offered on a job is the single most important source of coverage. Employer plans covered 46.7 million Americans in 1991, or approximately 58.3 percent of the population. If only the nonaged are considered, this figure rises to over two-thirds. Persons covered under employer plans are almost equally divided between those obtaining coverage through their own work (73.0 million) and those obtaining coverage as dependents on another family member's policy (74.0 million).

One important factor in employment-based coverage is the degree of attachment to the labor force. Employers who provide coverage to their full-time workers may not offer that coverage to part-time employees. Workers in seasonal industries, who are employed only part of the year, are also less likely to be covered. Table 29 shows the workforce attachment of the population without health insurance coverage in 1991. Over one-third of the uninsured, 13.4 million, worked only part time or part of the year, or were dependents of part time or part year workers, while another 15.9 percent had no work force attachment. However, 46.2 percent of the uninsured, approximately 16.4 million persons, were full year, full time workers or the dependents of such workers. All told, 29.8 million uninsured persons had at least some ties to the workforce.

The likelihood that workers will obtain coverage through their jobs is largely tied to two characteristics of employers: the size of the firm and the type of industry. Tables 30 and 32 show insurance coverage in 1991 for workers classed according to these two characteristics of their employers. As tables 27, 30, and 32 indicate, workers in the smallest firms were least likely to obtain employer-based coverage and most likely to be uninsured.

TABLE 29.—PERSONS WITHOUT HEALTH INSURANCE COVERAGE, BY ATTACHMENT TO THE WORKFORCE, 1991

[Thousands]

	Workers	Dependents	Total	Percent of uninsured
Nonworker	0	¹ 5,647	5,647	15.9
Full year/full time worker	8,902	7,476	16,378	46.2
Full year/part time worker	1,764	788	2,552	7.2
Part year/full time worker	5,398	2,304	7,702	21.7
Part year/part time worker	2,523	643	3,166	8.9
Total	18,587	16,858	35,445	100.0

¹ Includes both heads of household and dependents with no workforce attachment.

Note.—Items may not sum to total due to rounding. Full year workers were employed 50 or more weeks during the year. Full time workers worked an average of 35 or more hours per week during the weeks they were employed.

Source: CRS analysis of data from the March 1992 Current Population Survey.

TABLE 30.—PERCENT OF WORKERS OBTAINING HEALTH INSURANCE COVERAGE FROM SPECIFIED SOURCES, BY SIZE OF EMPLOYER, 1991

Firm size ¹	Own job	Family member's job	Medicare	Medicaid	Other ²	Uninsured
1 to 9	14.7	26.2	5.2	6.0	21.6	26.4
10 to 24	27.0	30.7	2.2	6.2	11.5	22.3
25 to 99	33.6	32.7	1.9	5.1	7.4	19.4
100 to 499	40.4	36.0	1.7	4.0	5.5	12.5
500 to 999	43.8	38.1	1.5	3.3	4.7	8.6
1,000 and over	43.4	39.9	1.2	2.9	5.1	7.6
Unemployed or not in labor force	³ 5.1	7.0	48.8	21.4	6.3	11.5
Total	28.9	29.4	11.4	7.6	8.6	14.1

¹ Firm size is that of the firm employing the worker for the longest period during the year.² "Other" includes, for example, privately purchased health insurance and Department of Veterans Affairs health care services.³ Persons reporting coverage through their own current or past employment and also reporting that they did not work during the year. These include retirees, as well as some persons who responded inaccurately to one of the questions.

Source: CRS analysis of data from the March 1992 Current Population Survey.

TABLE 31.—NUMBER OF WORKERS WITH HEALTH INSURANCE COVERAGE FROM SPECIFIED SOURCES, BY FIRM SIZE, 1991

[Thousands]

Firm size ¹	Own job	Family member's job	Medicare	Medicaid	Other ²	Uninsured	Total
1 to 9	5,755.6	7,402.7	1,511.1	745.19	5,520.8	7,219.0	28,154.0
10 to 24	4,734.6	2,716.8	287.42	354.32	1,424.6	2,711.1	12,229.0
25 to 99	8,625.9	3,122.9	339.96	455.51	1,341.5	3,377.4	17,263.0
100 to 499	11,464.0	2,936.1	336.6	377.87	1,118.4	2,401.7	18,635.0
500 to 999	4,833.6	1,138.8	105.05	130.39	396.89	714.81	7,319.6
1,000 plus	34,797.0	6,760.5	642.81	893.78	2,782.1	4,546.0	50,422.0
Total	70,210.7	24,077.8	3,222.9	2,957.1	12,584.3	20,970.0	134,023.0

¹ Firm size is that of the firm employing the worker for the longest period during the year.² "Other" includes, for example, privately purchased health insurance and Department of Veterans Affairs health care services.

Source: CRS analysis of data from the March 1992 Current Population Survey.

Table 32 shows insurance coverage for workers by industry class. The industries showing the lowest rates of job-based coverage are those where employment is seasonal (as in agriculture or construction) and those that tend to use low-wage workers and/or part time workers (as in personal services, entertainment, and retail trade). Employer-provided health insurance is most common in industries with a stable work force, such as government, and those whose workers are generally in collective bargaining arrangements, such as manufacturing, transportation, and mining.

TABLE 32.—PERCENT OF WORKERS OBTAINING HEALTH INSURANCE COVERAGE FROM SPECIFIED SOURCES, BY MAJOR INDUSTRY CLASS, 1991

Industry class ¹	Own job	Family member's job	Medicare	Medicaid	Other ²	Uninsured
Agriculture, forestry and fisheries	11.0	20.6	6.4	7.9	26.3	28.0
Mining	34.3	49.3	0.5	2.4	3.6	10.03
Construction	23.9	32.0	1.4	5.8	10.6	26.3
Manufacturing, durable goods	41.7	42.9	0.8	1.9	4.2	8.5
Manufacturing, nondurable goods	39.8	38.0	1.3	3.3	4.9	12.9
Transportation, communications, and utilities	39.8	41.9	0.8	1.5	6.2	9.9
Wholesale trade	35.2	42.3	1.4	2.5	7.6	11.2
Retail trade	26.0	26.6	2.7	8.0	12.4	24.3
Finance, insurance, and real estate	41.8	36.1	2.4	1.7	9.3	8.8
Business and repair services	25.6	28.5	2.6	8.2	11.8	23.2
Personal services, including household....	18.0	22.5	6.6	9.6	13.1	30.1
Entertainment and recreation services	29.7	29.2	2.8	5.5	14.5	18.3
Professional and related services	40.9	33.6	2.9	3.5	9.5	9.7
Public administration	42.8	45.3	1.5	1.3	5.6	3.6

¹ Industry is that in which the worker was employed the longest during the year.

² "Other" includes, for example, privately purchased health insurance and Department of Veterans Affairs health care services.

Source: CRS analysis of data from the March 1992 Current Population Survey.

One major trend in employer health benefit plans in recent years is a shift towards self-insurance, under which an employer directly assumes the financial risk for health care costs incurred by their employees. A self-insured firm may use an insurance company only to perform administrative tasks, such as claims processing, or it may carry on these functions in-house. Some firms are "partially insured", they retain responsibility for most health care costs but

buy protection for extraordinary expenses. Because of the financial risks involved, smaller firms are more likely to buy full coverage from a health insurance company. Note that table 33 shows only those firms that offer health benefits and does not include plans covered through health maintenance organizations (HMOs), which are almost always fully insured arrangements.

TABLE 33.—INSURANCE FUNDING ARRANGEMENTS BY FIRM SIZE, 1990

[Percent of conventional plans using arrangement]

Number of employees	1 to 24	25 to 99	100 or more	All firms
Fully insured.....	84.4	81.8	35	43.7
Partially insured	10.9	12.6	44.2	38.2
Fully self-funded.....	4.7	5.5	20.8	18.1

Source: Health Insurance Association of America, Employer Survey, 1990.

TRENDS IN HEALTH INSURANCE COVERAGE

An examination of the trends in health insurance coverage using the Current Population Survey is problematic because the health insurance questions asked by this survey and the types of individuals surveyed were changed beginning with the March 1988 survey. These changes result in a drop in the number of uninsured from 1986 to 1987 (and later years) that is unrelated to actual changes in insurance coverage. Thus, the data for 1986 and prior years are not comparable to data for 1987 and later years.

Between 1979 and 1986, the percent of the nonaged population who were uninsured increased from 14.6 percent to 17.5 percent. The number of uninsured would have been expected to grow from 28.4 to 30.8 million simply because the overall nonaged population grew. However, the number of nonaged uninsured actually grew from 28.4 million to 36.8 million. That is, the number of uninsured increased by 8.4 million people, yet only 2.4 million or 29 percent of the growth was due to an expanding nonaged population.

Table 34 shows trends in the nonaged uninsured for selected years from 1979 to 1991. Most of the change in health insurance coverage occurred between 1979 and 1984; from 1984 to 1986, coverage rates remained fairly constant. The number and percent of the nonaged uninsured increased each year over the 1987-91 period, with 1989 showing a smaller percentage increase over 1988 than the increases in other years.

To examine why the uninsured increased since 1979, table 35 displays insurance coverage by source and year.

TABLE 34.—NUMBER AND PERCENT OF THE NONAGED POPULATION WITHOUT HEALTH INSURANCE, 1979 AND 1983-91

	1979	1983	1984	1985	1986	1987 ¹	1988 ¹	1989 ¹	1990 ¹	1991 ¹
Number uninsured (millions)	28.4	34.8	36.8	36.7	36.8	30.7	32.4	33.0	34.4	35.2
Percent uninsured (percent)	14.6	16.9	17.7	17.6	17.5	14.4	15.1	15.3	15.7	15.9

¹ Data for years after 1986 are not comparable to that for 1986 and prior years because of changes in the questions asked and the population groups surveyed.
 Source: Table prepared by CRS based on data from the March 1980, and the March 1984 through the March 1992 CPS. Information from 1980 to 1982 is not presented due to errors on the CPS computer tapes for those years.

TABLE 35.—SOURCES OF HEALTH INSURANCE COVERAGE BY YEAR FOR NONAGED POPULATION, 1979 AND 1983-91

	Percentage of nonelderly population									
	1979	1983	1984	1985	1986	1987 ¹	1988 ¹	1989 ¹	1990 ¹	1991 ¹
Employment-based plans:										
Covered on own job.....	33.1	32.5	32.6	33.1	33.4	32.9	33.0	33.4	32.6	32.3
Covered through someone else.....	34.3	32.1	31.4	31.2	31.4	33.4	33.1	33.5	32.6	32.3
Total employment-based.....	67.4	64.6	64.0	64.3	64.8	66.3	66.1	66.9	65.2	64.6
Other plans ²	17.9	18.5	18.3	18.1	17.7	19.3	18.8	17.8	19.0	19.5
Uninsured.....	14.6	16.9	17.7	17.6	17.5	14.4	15.1	15.3	15.7	15.9
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Data for years after 1986 are not comparable to that for 1986 and prior years because of changes in the questions asked and the population groups surveyed.
² Excludes persons covered by employment-based plans.

Note.—Percentages may not add to 100.0 due to rounding.

Source: Table prepared by CPS based on data from the March 1980, and the March 1984 through the March 1992 CPS. Information from 1980 to 1982 is not presented due to errors on the CPS computer tapes for those years.

The most dramatic trend shown in table 35 is the decline from 1979 to 1986 in the percent of the nonaged population covered by employment-based plans through another family member, from 34.3 percent to 31.4 percent. This proportion declined consistently between 1979 and 1984, and then leveled off. On the other hand, the percent of the nonelderly population covered by health insurance from their own work actually increased between 1979 and 1986 from 33.1 to 33.4 percent. This coverage declined during the early 1980s but increased by nearly a full percentage point between 1983 and 1986.

Coverage through one's own job increased slightly in 1988 and 1989 and then declined in 1991 to 32.3 percent. Coverage from someone else's job declined slightly in 1988, rose slightly in 1989, and declined in 1991 to 32.3 percent, below the 1987 level of 33.4 percent. Coverage from plans not employment-based declined from 1987 to 1989, then increased in 1991 exceeding the 1987 level.

UNCOMPENSATED CARE COSTS IN PPS HOSPITALS, 1980-89

Uncompensated care is a term used to describe inpatient and outpatient care given to patients who are unable or unwilling to pay. It includes charity care and bad debts. Charity care is care given for which no payment is expected. Bad debt consists of charges that are not paid by uninsured individuals or partial charges, such as copayments, that are not paid by insured individuals. For this analysis, these charges have been adjusted to reflect the cost of care that was provided but not paid for.

Public hospitals and some private institutions receive government operating subsidies that at least partially offset their uncompensated care losses. These subsidies are not always directed specifically towards charity care, but they nonetheless serve to lessen the burden of a high charity care load. This analysis thus examines uncompensated care both before and net of government subsidies.

The information for this analysis was provided by the American Hospital Association from their Annual Survey of Hospitals. It describes the trend and distribution of uncompensated care for hospitals covered under the Medicare prospective payment system (PPS).

The analysis produced four major findings. First, the financial burden of uncompensated care has increased substantially throughout the 1980s. Before offsetting operating subsidies from State and local governments, total uncompensated care costs in PPS hospitals increased 13 percent per year, reaching \$12 billion by 1989 (see table 36). This is nearly 2 percentage points per year faster than the rise in total hospital costs. The portion of these costs that was not covered by government operating subsidies grew even faster—14 percent per year. Government subsidies have not increased as fast as total hospital cost inflation, with the lag being most pronounced from 1987 to 1989 (see chart 1). Between 1980 to 1989, the proportion of uncompensated care costs covered by government subsidies dropped from 29 percent to 20 percent. This proportion increased slightly in 1990, to 21 percent.

Second, the burden of uncompensated care costs is spreading. Uncompensated care has traditionally been associated with large, urban public hospitals. Over the last decade, however, the problem

has increasingly affected the entire industry. In the first half of the 1980s, both urban and rural government hospitals had higher net uncompensated care costs, as a percentage of total costs, than voluntary hospitals, and the gap between the two widened (see table 37). However, this gap has steadily narrowed since then. Moreover, the government subsidies received by public hospitals reduce their uncompensated care burden.

The uncompensated care burden also tends to increase with hospitals size. However, after accounting for government subsidies, the difference between the smallest and largest groups in urban areas is modest. There is a much more pronounced difference in rural areas. The net uncompensated care rate (i.e., uncompensated care costs net of government subsidies, as a percentage of total costs) for rural hospitals with fewer than 50 beds averaged only 3.5 percent in the last 3 years of the decade, reflecting the fact that many of these institutions receive local government support. The largest rural hospitals, on the other hand, receive almost no government support and consequently devoted a net of 6.0 percent of their costs to uncompensated care.

Third, while charity care and bad debts have become a significant financial burden for a greater number and variety of hospitals, the amount of uncompensated care provided by individual hospitals varies within all of the standard hospital groups. Among all PPS hospitals, the proportion of resources devoted to uncompensated care net of subsidies is 5.7 percent for the top quartile—the 25 percent of hospitals with the highest uncompensated care burdens—but only 2.3 percent, or less than half as much, in the bottom quartile (see table 38). The same general pattern prevails in every hospital group studied, with the widest variation seen among public hospitals. There is a small group of public hospitals shouldering a truly disproportionate uncompensated care burden, and there are other government hospitals devoting a smaller than average share of resources to unpaid care.

Furthermore, uncompensated care costs also vary among metropolitan areas. Of the Nation's 20 largest cities between 1984 to 1989, the hospitals in Washington, D.C., had the highest average uncompensated care rate, 6.8 percent of total costs, compared with Milwaukee, which had the lowest average uncompensated care rate, 2.4 percent of total costs (see table 39). Some urban areas, like Boston and Washington, exhibited the traditional pattern of uncompensated care being concentrated in their core city hospitals. But in other areas, like Dallas and San Diego, the suburban hospitals had higher uncompensated care rates than their central city counterparts.

Finally, while a hospital's uncompensated care load is an important determinant of its overall financial condition, it is not the predominant factor in predicting financial performance. Perhaps the most important factor in this regard is the degree to which hospitals are able to generate revenue from other payers and non-patient care sources to cover their uncompensated care costs and Medicaid shortfalls.

TABLE 36.—HOSPITAL UNCOMPENSATED CARE COSTS AND GOVERNMENT OPERATING SUBSIDIES, 1980–90

Measure	Amount (in billions)				Average annual percent change		
	1980	1984	1989	1990	1980–84	1984–90	1980–90
Uncompensated care costs before government subsidies.....	\$3.6	\$6.9	\$10.0	\$12.1	17.7	9.8	12.9
Government operating subsidies.....	1.0	1.7	2.0	2.5	14.2	6.6	9.6
Uncompensated care costs net of government subsidies.....	2.6	5.2	8.0	9.6	18.9	10.8	14.0
Proportion of uncompensated care costs covered by government subsidies (percent)	29	24	20	21			

Note.—Includes PPS hospitals only. Proportions calculated from the dollar amounts shown may not equal the proportions shown due to rounding.

Source: ProPAC Analysis of AHA Annual Survey data.

CHART 1. CUMULATIVE GROWTH IN UNCOMPENSATED CARE COSTS AND GOVERNMENT SUBSIDIES, 1980-90

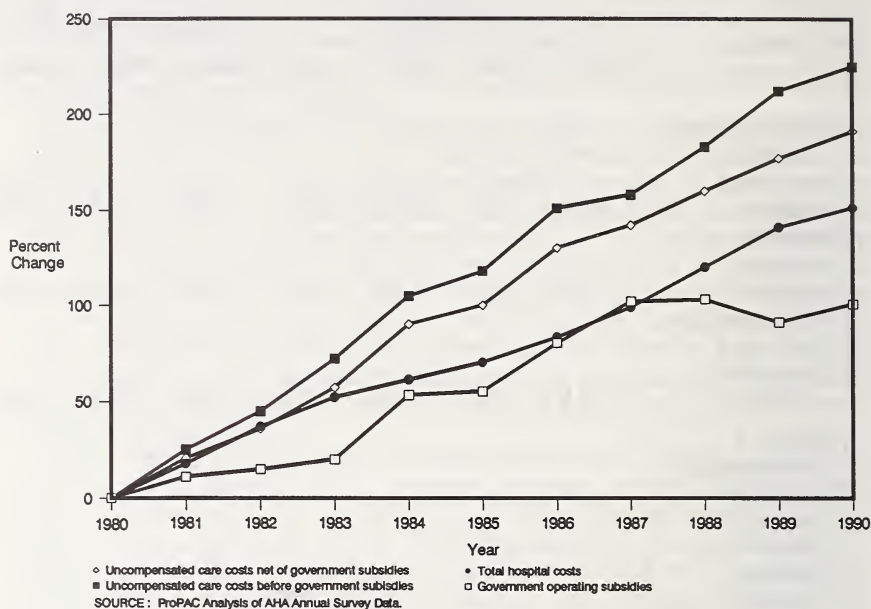


TABLE 37.—UNCOMPENSATED CARE COSTS AS A PERCENT OF TOTAL COSTS, BY HOSPITAL GROUP

[In percent]

Hospital group	Uncompensated care costs before Government subsidies			Uncompensated care costs net of Government subsidies		
	1981-84	1985-87	1988-89	1981-84	1985-87	1988-89
All hospitals.....	5.3	6.2	6.1	4.0	4.7	4.7
Urban	5.4	6.3	6.2	4.0	4.7	4.7
Rural	4.8	5.5	5.5	4.2	4.8	4.9
Urban central city ¹	6.4	7.4	6.9	4.2	4.9	4.7
Urban ring ¹	3.7	4.6	4.9	3.4	4.2	4.5
Large urban.....	5.4	6.4	6.1	3.8	4.6	4.4
Other urban.....	5.5	6.1	6.2	4.3	4.9	5.1
Rural referral.....	5.0	5.5	5.6	4.8	5.3	5.5
Sole community.....	5.1	5.3	5.2	4.1	4.3	4.2
Other rural	4.6	5.6	5.4	4.0	4.7	4.6
Major teaching	9.7	10.9	9.3	4.4	5.2	4.3

TABLE 37.—UNCOMPENSATED CARE COSTS AS A PERCENT OF TOTAL COSTS, BY HOSPITAL GROUP—Continued

[In percent]

Hospital group	Uncompensated care costs before Government subsidies			Uncompensated care costs net of Government subsidies		
	1981-84	1985-87	1988-89	1981-84	1985-87	1988-89
Other teaching.....	4.4	5.0	5.4	4.1	4.7	5.1
Non-teaching.....	4.2	5.0	5.1	3.8	4.5	4.7
Medicare disproportionate share:						
Large urban.....	7.3	8.7	7.8	4.3	5.2	4.7
Other urban.....	7.1	7.7	7.7	5.0	5.7	5.8
Rural.....	6.7	7.6	7.4	5.9	6.8	6.7
Non-disproportionate share.....	3.7	4.4	4.6	3.4	4.1	4.3
Urban < 100 beds.....	3.7	4.9	5.0	3.2	3.9	4.2
Urban 100 to 249 beds.....	4.3	5.5	5.6	3.7	4.8	4.9
Urban 250 to 404 beds.....	4.2	4.9	5.2	3.5	4.4	4.7
Urban 405 to 684 beds.....	4.9	5.6	5.6	4.1	4.7	4.8
Urban 685 plus beds.....	6.8	7.7	7.2	4.3	5.0	4.8
Rural < 50 beds.....	4.2	5.2	5.0	3.1	3.5	3.4
Rural 50 to 99 beds.....	4.8	5.4	5.3	4.0	4.7	4.6
Rural 100 to 169 beds.....	4.9	5.5	5.4	4.5	5.2	5.1
Rural 170 plus beds.....	5.1	5.9	6.0	5.0	5.7	6.0
New England.....	4.7	5.3	5.6	4.5	5.0	5.4
Middle Atlantic.....	4.5	5.3	5.2	3.6	4.2	3.9
South Atlantic.....	7.3	8.2	7.7	5.7	6.5	6.3
East North Central.....	3.8	4.1	4.2	3.1	3.5	3.7
East South Central.....	7.7	8.0	8.3	6.2	6.8	7.2
West North Central.....	3.9	4.5	4.1	2.8	3.4	3.1
West South Central.....	8.7	9.9	9.0	4.7	5.6	5.5
Mountain.....	6.1	6.2	6.5	4.6	4.9	5.2
Pacific.....	4.1	5.9	5.9	3.1	4.3	4.2
Voluntary.....	4.0	4.6	4.9	3.9	4.5	4.8
Proprietary.....	3.2	4.4	4.5	3.1	4.4	4.5
Urban government.....	13.0	15.4	13.4	4.9	6.2	4.8
Rural government.....	5.8	6.9	6.5	4.2	4.8	4.8

¹ Nation's 100 largest cities only.

Note: Includes PPS hospitals only.

TABLE 38.—DISTRIBUTION OF UNCOMPENSATED CARE COSTS (MEASURED NET OF GOVERNMENT SUBSIDIES) AS A PERCENT OF TOTAL COSTS, BY HOSPITAL GROUP, 1989

[In percent]

Hospital group	Percentile				
	10th	25th	50th	75th	90th
All hospitals.....	0.7	2.3	4.3	5.7	8.3
Urban.....	1.5	2.8	4.5	5.8	8.4
Rural.....	0.0	1.8	4.0	5.6	8.3
Urban central city ¹	1.5	2.9	4.5	5.6	8.0
Urban ring ¹	1.6	2.8	4.5	5.7	8.0
Large urban.....	1.5	2.8	4.5	5.4	7.8
Other urban.....	1.5	2.9	4.5	6.2	9.1
Rural referral.....	1.8	3.1	4.8	7.0	9.4
Sole community.....	0.0	1.4	3.6	5.1	7.6
Other rural.....	0.0	1.7	4.0	5.5	8.3
Major teaching.....	0.0	1.4	3.8	6.2	10.3
Other teaching.....	1.6	2.7	4.5	6.0	8.4
Non-teaching.....	0.5	2.2	4.3	5.6	8.2
Disproportionate share:					
Large urban.....	1.1	2.9	4.6	6.3	9.2
Other urban.....	1.7	3.2	4.8	7.5	10.8
Rural.....	1.4	3.0	4.7	8.2	10.3
Non-disproportionate share.....	0.5	2.1	4.0	5.2	7.6
Urban < 100 beds.....	1.1	2.3	4.5	5.1	7.9
Urban 100 to 249 beds.....	1.8	3.1	4.6	5.8	8.1
Urban 250 to 404 beds.....	1.6	2.8	4.0	5.5	8.1
Urban 405 to 684 beds.....	1.6	3.0	4.4	6.5	9.2
Urban 685 plus beds.....	1.1	2.7	4.6	6.4	9.5
Rural < 50 beds.....	0.0	0.5	2.5	4.6	7.0
Rural 50 to 99 beds.....	0.9	2.5	4.5	6.3	8.6
Rural 100 to 169 beds.....	2.1	3.2	4.6	6.9	9.2
Rural 170 plus beds.....	2.0	3.6	5.2	8.1	10.0
New England.....	2.6	3.8	5.0	6.6	7.9
Middle Atlantic.....	1.2	2.0	3.3	4.8	8.0
South Atlantic.....	2.6	4.1	5.5	7.9	10.2
East North Central.....	1.5	2.3	3.6	4.8	6.0
East South Central.....	2.5	4.2	4.8	7.9	10.6
West North Central.....	0.0	0.6	2.0	3.7	5.0
West South Central.....	0.0	3.3	4.7	7.2	9.5
Mountain.....	0.0	2.0	4.0	5.3	7.5
Pacific.....	0.7	2.4	4.3	5.0	6.7

TABLE 38.—DISTRIBUTION OF UNCOMPENSATED CARE COSTS (MEASURED NET OF GOVERNMENT SUBSIDIES) AS A PERCENT OF TOTAL COSTS, BY HOSPITAL GROUP, 1989—Continued

[In percent]

Hospital group	Percentile				
	10th	25th	50th	75th	90th
Voluntary.....	1.6	2.6	4.5	5.9	8.2
Proprietary.....	2.3	3.9	4.5	4.6	6.5
Urban government.....	0.0	1.3	4.1	7.4	12.1
Rural government.....	0.0	0.0	2.9	5.6	8.7

¹ Nation's 100 largest cities only.

Note: Includes PPS hospitals only.

TABLE 39.—HIGHEST AND LOWEST UNCOMPENSATED CARE COSTS AS A PERCENT OF TOTAL COSTS AMONG THE NATION'S 20 LARGEST CITIES (MEASURED NET OF GOVERNMENT SUBSIDIES), 1984–89 AVERAGE

[In percent]

Hospital group	Central city	Suburban ring	Ratio of city to ring
Highest uncompensated care costs:			
Washington, DC.....	6.8	4.7	1.45
Boston.....	6.4	4.7	1.36
Phoenix.....	6.0	3.0	2.00
Dallas.....	5.8	6.0	.97
Baltimore.....	5.6	3.6	1.56
Lowest uncompensated care costs:			
Detroit.....	3.8	2.9	1.31
Columbus.....	3.7	4.7	.79
San Diego.....	3.5	4.1	.85
San Francisco.....	2.9	4.8	.60
Milwaukee.....	2.4	1.6	1.50

Note: San Jose and Memphis, omitted from the analysis due to inadequate data. Includes PPS hospitals only.

INTERNATIONAL HEALTH SPENDING ⁴

This section analyzes trends in health expenditures for 24 Organization for Economic Cooperation and Development (OECD) countries from 1970 to 1991. Table 40 illustrates total health expenditures as a percentage of gross domestic product (GDP). In 1970, the mean percent of GDP was 5.1 percent, with the United States being 45 percent higher than the average with 7.4 percent of GDP. By 1991, the overall mean percent of GDP comprised of health expenditures had increased to 7.9 percent while the United States health spending as a share of GDP had increased to 13.4 percent, some 70 percent greater than the overall average.

The second to the last column in table 40 presents per capita health expenditures denominated in U.S. dollars. The last column illustrates public health expenditures as a percent of total health spending. This ranged from 61 percent in the United States to over 90 percent in Luxembourg, Norway, Sweden, Germany, Iceland, Ireland, Spain, Switzerland, and the U.K. with an OECD average of 84.2 percent.

⁴ The data and analysis in this section are from Health Affairs, "Health Care Systems in Twenty-four Countries," by George J. Schieber, Jean-Pierre Poullier, and Leslie M. Greenwald, Fall 1991. Also, OECD press release, March 5, 1993.

TABLE 40.—TOTAL HEALTH EXPENDITURE AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT [GDP], PER CAPITA HEALTH SPENDING AND PERCENT OF MEDICAL EXPENDITURES COVERED BY PUBLIC INSURANCE SCHEME, FOR SELECTED CALENDAR YEARS 1960–91

[In percent except per capita]

Country	1960	1970	1980	1985	1990	1991	Per capita	Percent ¹
Australia.....	4.9	5.7	7.3	7.7	8.2	8.6	\$1,407	70.0
Austria	4.4	5.4	7.9	8.1	8.3	8.4	1,448	84.0
Belgium.....	3.4	4.1	6.6	7.4	7.6	7.9	1,377	86.0
Canada.....	5.5	7.1	7.4	8.5	9.5	10.0	1,915	84.0
Denmark.....	3.6	6.1	6.8	6.3	6.3	6.5	1,151	85.0
Finland.....	3.9	5.7	6.5	7.2	7.8	8.9	1,426	82.0
France.....	4.2	5.8	7.6	8.5	8.8	9.1	1,650	74.5
Germany.....	4.8	5.9	8.4	8.7	8.3	8.5	1,659	92.0
Greece.....	2.9	4.0	4.3	4.9	5.4	5.2	404	85.0
Iceland.....	3.5	5.2	6.4	7.1	8.3	8.4	1,447	93.0
Ireland.....	4.0	5.6	9.2	8.2	7.0	7.3	840	90.0
Italy.....	3.6	5.2	6.9	7.0	8.1	8.3	1,408	75.0
Japan.....	3.0	4.6	6.6	6.6	6.6	6.6	1,267	87.0
Luxembourg.....	N/A	4.1	6.8	6.8	7.2	7.2	1,494	91.0
Netherlands.....	3.9	6.0	8.0	8.0	8.2	8.3	1,360	71.0
Norway.....	3.3	5.0	6.6	6.4	7.4	7.6	1,305	90.0
New Zealand.....	4.3	5.2	7.2	6.5	7.2	7.6	1,050	N/A
Portugal.....	N/A	3.1	5.9	7.0	6.7	6.8	624	N/A
Spain.....	1.5	3.7	5.6	5.7	6.6	6.7	848	90.0
Sweden.....	4.7	7.2	9.4	8.8	8.6	8.6	1,443	94.0
Switzerland.....	3.3	5.2	7.3	7.6	7.8	7.9	1,713	91.0
Turkey.....	N/A	N/A	4.0	2.8	4.0	4.0	142	N/A
United Kingdom.....	3.9	4.5	5.8	6.0	6.2	6.6	1,035	93.0
United States.....	5.3	7.4	9.2	10.5	12.4	13.4	2,867	61.0
OECD Average.....	3.9	5.1	7.0	7.2	7.6	7.9	1,262	84.2

¹Percent of medical expenditures covered by public insurance scheme.

Source: Schieber, George J. and Jean-Pierre Poullier. "International Health Spending: Issues and Trends." Health Affairs, Spring 1991 p. 109; Schieber, George J., Jean-Pierre Poullier, and Leslie M. Greenwald, "Health Care Systems in Twenty-four Countries." Health Affairs, Fall 1991, p. 24. Also, OECD press release, March 5, 1993.

APPENDIX D. MEDICARE REIMBURSEMENT TO HOSPITALS

Medicare part A provides reimbursement for inpatient hospital care through a payment system based on prospectively set rates, the prospective payment system (PPS), for hospital cost reporting periods beginning on or after October 1, 1983.

Before the passage of the Social Security Amendments of 1983 (P.L. 98-21) the Medicare program reimbursed hospitals according to the reasonable costs they incurred in providing services to Medicare beneficiaries. Because the actual reasonable costs could not be determined until after the hospital had provided the services and reported its costs to the Medicare program, this method of reimbursement was known as retrospective cost-based reimbursement.

Under authority provided by the Social Security Amendments of 1972 (P.L. 92-603), the Department of Health and Human Services (HHS) placed certain limits on inpatient routine operating costs recognized as reasonable (referred to as section 223 limits for the specific section in the law). The Tax Equity and Fiscal Responsibility Act of 1982 (P.L. 97-248, commonly referred to as TEFRA) expanded previously existing limits to include all other inpatient hospital operating costs. Further, it established a new 3-year Medicare ceiling (or target rate) on the allowable annual rate of increase in operating costs per case for inpatient hospital services. TEFRA also required that HHS develop proposals for the prospective payment of hospitals under Medicare. The proposal from HHS was presented to the Congress at the end of 1982.

Legislation based on this prospective payment proposal was enacted in Public Law 98-21, which established a new method of Medicare reimbursement for hospital inpatient care—the prospective payment system (PPS). This appendix describes the major reimbursement provisions of PPS.

GENERAL SUMMARY

Medicare payment for hospital inpatient services is made according to a prospective payment system, rather than a retrospective cost-based system. Medicare payments are made at predetermined, specific rates which represent the average cost, nationwide, of treating a Medicare patient according to his or her medical condition. The classification system used to group hospital inpatients according to their diagnoses is known as diagnosis-related groups (DRGs). Separate DRG rates apply depending on whether a hospital is located in a large urban area (greater than 1 million population, or 970,000 in New England), other urban area, or rural area of the country, as determined by the Office of Management and Budget (OMB) Metropolitan Statistical Area (MSA) system.

During a 4-year transition period, a declining portion of the total prospective payment was based on a hospital's historical reasonable

costs and an increasing portion was based on a combination of regional and national Federal DRG rates. In the fifth year of the program (fiscal year 1988) and thereafter, Medicare payments are generally determined under a national DRG payment methodology. Special transition provisions apply to hospitals located in certain geographic regions.

If a hospital can treat a patient for less than the payment amount, it can keep the savings. If the treatment costs more, the hospital must absorb the loss. A hospital is prohibited from charging Medicare beneficiaries any amounts (except for deductibles, copayment amounts, and for services not covered by Medicare) which represent any difference between the hospital's cost of providing covered care and the Medicare DRG payment amount.

Certain hospital costs are excluded from the prospective payment system and are paid on a reasonable cost basis. In addition, certain hospitals are excluded from the new system and continue to be reimbursed on a reasonable cost basis, subject to rate of increase limits. Authority is provided for States to establish their own all-payer hospital payment systems if they meet certain Federal requirements.

BASIC PAYMENT SYSTEM

Unless excluded from the prospective payment system, each Medicare participating hospital is paid a predetermined payment rate per discharge for each type of patient treated. Types of patients are defined by the diagnosis related groups patient classification system which assigns each hospital inpatient to one of 487 patient categories (DRGs) based on the diagnosis and the type of treatment received (medical or surgical).

The payment rate for each DRG is the product of two components: a base payment amount which applies for all DRGs, and a relative weighting factor for the particular DRG. The base payment amount is intended to represent the cost of a typical (average) Medicare inpatient case. The relative weighting factor represents the relative costliness of an average case in the particular DRG compared to the cost of the overall average Medicare case (i.e., relative to the base payment amount). When the DRG relative weights are each multiplied by the base payment amount, the result is a complete set of prices for all DRGs. Separate DRG rates apply to hospitals located in large urban, other urban, or rural areas (separate base payment amounts apply in these areas, but the DRG relative weighting factors are the same). In addition, the base payment amount (and, therefore, each DRG rate) is adjusted for area differences in hospital wage levels compared to the national average hospital wage level.

Transition period

Although the transition to prospective payment rates was completed in fiscal year 1988, special transition provisions apply to hospitals located in certain geographic regions.

In a few regions with historically higher costs, Public Law 100-203 provided for the continued use of Federal amounts based in part on regional rates until September 30, 1990. Under this transi-

tion provision, known as the "regional floor," the DRG payment rate is determined as the higher of 100 percent of the national amount, or 85 percent of the national amount plus 15 percent of the regional amount.

Public Law 101-403, the Continuing Resolution of October 1, 1990, extended the regional floor provision on a budget neutral basis through October 20, 1990. Public Law 101-508 (OBRA 1990) extends the regional floor provision for discharges occurring before October 1, 1993, not subject to budget neutrality.

Update factors

PPS payment rates are updated each year using an "update factor." The annual update factor applied to increase the Federal base payment amounts is determined, in part, by the projected increase in the hospital market basket index. The market basket index measures the cost of goods and services purchased by hospitals, yielding one price inflator for all hospitals in a given year. Table 1 shows the categories of expense used in developing the index. The update factor also includes adjustments for increases in hospital productivity, technological change, and other factors that affect the level of operating cost per discharge. The annual update factor is also adjusted to include increases in average payments per case attributable to increases in case mix due to changes in coding and reporting accuracy.

Before fiscal year 1988, the same factor was used for all hospitals; however, in subsequent years separate factors have applied to hospitals according to their location. Separate update factors have been set for hospitals located in large urban, other urban and rural areas of the country.

From October 1, 1990, through October 20, 1990, the PPS hospital update factors were set equal to the full market basket increase. Public Law 101-508 provided for a freeze in hospital payments at fiscal year 1990 levels for the period from October 21, 1990, through December 31, 1990. For this period, the market basket percentage increase applicable to PPS and PPS-exempt hospitals was deemed to be equal to zero (0) percent.

OBRA 1990 (Public Law 101-508) sets separate update factors for hospitals located in large and other urban areas, and for hospitals located in rural areas. The factors are designed to eliminate the payment differential between other urban and rural hospitals by fiscal year 1995. For large and other urban hospitals, the following update factors are: for fiscal year 1991, for discharges occurring on or after January 1, 1991, the market basket increase (MBI) minus 2.0 percentage points; for fiscal year 1992, the MBI minus 1.6 percentage points; for fiscal year 1993, the MBI minus 1.55 percentage points; and for fiscal year 1994-95, the full MBI.

TABLE 1.—HOSPITAL PROSPECTIVE PAYMENT INPUT PRICE INDEX (THE “MARKET BASKET”)

Expense categories	Relative importance ¹					Fiscal year 1994 projected price inflation rate (per cent change)
	1982	1987	1990	1992	1993	
1. Wages and Salaries ²	50.47	52.24	51.86	52.31	52.32	4.0
2. Employee Benefits ²	8.92	9.47	10.02	10.49	10.79	6.1
3. Professional Fees ²	1.58	1.65	1.63	1.65	1.66	4.5
4. Energy and Utilities.....	3.70	2.46	2.40	2.18	2.15	3.4
a. Fuel, Oil, Coal, and Other Petroleum	1.41	0.69	0.73	0.61	0.57	5.6
b. Electricity.....	1.23	1.15	1.06	1.05	1.03	1.3
c. Natural Gas.....	0.52	0.33	0.28	0.27	0.30	4.2
d. Motor Gasoline	0.51	0.25	0.29	0.23	0.22	6.5
e. Water and Sewage.....	0.03	0.04	0.04	0.04	0.04	5.7
5. Malpractice Insurance	0.71	1.48	1.60	1.54	1.57	8.5
6. All Other	34.63	32.71	32.50	31.83	31.51	3.8
All Other Products	23.35	21.75	21.70	21.12	20.92	3.6
a. Pharmaceuticals.....	3.03	3.93	4.33	4.64	4.72	6.1
b. Food.....	3.54	3.29	3.21	3.08	3.02	2.6
(1) Contract Service	1.18	1.19	1.17	1.93	1.88	2.3
(2) Direct Purchase	2.36	2.10	2.05	1.15	1.14	3.1
c. Chemicals and Cleaning Products.....	3.93	3.15	3.18	2.93	2.89	3.9
d. Surgical and Medical Instruments	2.97	2.64	2.48	2.42	2.39	2.9
e. Photographic Supplies	2.84	2.60	2.60	2.41	2.35	2.7
f. Rubber and Plastics.....	2.72	2.31	2.19	2.10	2.07	0.7
g. Paper Products	1.48	1.39	1.41	1.30	1.26	5.7
h. Apparel	1.34	1.13	1.05	1.02	1.01	2.2
i. Minor Machinery Equipment.....	0.54	0.49	0.46	0.45	0.44	2.6
j. Miscellaneous Products.....	0.95	0.83	0.80	0.78	0.77	2.5
All Other Services.....	11.28	10.96	10.81	10.71	10.59	4.3
a. Business Services ²	4.03	3.79	3.78	3.70	3.66	5.1
b. Computer and Data Processing Services ²	1.81	2.01	2.12	2.08	2.08	5.3
c. Transportation and Shipping.....	1.24	1.21	1.20	1.20	1.20	4.6
d. Telephone.....	0.95	0.97	0.84	0.82	0.79	2.1
e. Blood Services ²	0.65	0.56	0.53	0.53	0.51	2.8
f. Postage ²	0.40	0.37	0.36	0.39	0.38	0.0
g. All Other Services: Labor Intensive ²	1.22	1.22	1.17	1.18	1.18	4.2
h. All Other Services: Nonlabor Intensive.....	0.83	0.80	0.79	0.80	0.79	3.1
Total.....	100.00	100.00	100.00	100.00	100.00	4.2

¹ These weights are used to develop the revised labor-related/nonlabor-related components of the standardized rates.

² Considered labor-related.

Source: Health Care Financing Administration, Office of the Actuary, May 1993.

The update factors for rural hospitals are: for fiscal year 1991, for discharges occurring on or after January 1, 1991, the MBI minus 0.7 percentage points; for fiscal year 1992, the MBI minus 0.6 percentage points; for fiscal year 1993, the MBI minus 0.55 percentage points; for fiscal year 1994, the MBI plus 1.5 percentage points; and for fiscal year 1995, the amount necessary to provide rural hospitals with an average standardized amount equal to that of other urban hospitals.

For fiscal year 1993, the market basket increase is estimated to be 4.1 percent, providing the following net fiscal year 1993 update factors: for large and other urban hospitals, 2.55 percent; for rural hospitals, 3.55 percent.

DRG weighting factors

Public Law 98-21 required the HHS Secretary to adjust the DRG definitions and weighting factors in fiscal year 1986 and at least every 4 years thereafter to reflect changes in treatment patterns, technology, and other factors which may change the relative use of hospital resources. Public Law 99-509, however, required the Secretary to adjust the DRG definitions and weighting factors each year, beginning in fiscal year 1988.

OBRA 1989 required the Secretary to reduce the weighting factor for each DRG by 1.22 percent for discharges in fiscal year 1990. In addition, the Secretary is prohibited from adjusting DRG weighting factors on other than a budget neutral basis beginning in fiscal year 1991.

Table 2 shows the 20 DRGs accounting for the largest numbers of Medicare inpatient discharges during fiscal year 1990. Information about all DRGs appears in table 22 at the end of this appendix.

Source and calculation of the hospital wage index

The hospital wage index is used to adjust a hospital's base payment amount for the wage level of the hospital's area. This is accomplished by multiplying the labor-related component of the Federal portion of the payment amount by a wage index. The wage index is intended to measure the average wage level for hospital workers in each urban area (metropolitan statistical area or MSA) or rural area (non-MSA parts of States) relative to the national average wage level.

TABLE 2.—SHORT STAY HOSPITAL DISCHARGES, TWENTY DIAGNOSIS-RELATED GROUPS WITH THE MOST DISCHARGES IN FISCAL YEAR 1991

DRG number and description	Discharges (in thousands)	Percent of total	Rank	Average length of stay
Total DRGs.....	10,357.1	100.0	.....	.....
20 Leading DRGs.....	4,386.0	42.3	.....	.....
14 Specific cerebrovascular disorders except transient ischemic attack.....	342.3	3.3	4	10.1
15 Transient ischemic attack and precerebral occlusions.....	135.3	1.3	17	5.5
79 Respiratory infections and inflammations ¹	140.7	1.4	15	11.9
88 Chronic obstructive pulmonary disease.....	166.6	1.6	11	7.4
89 Simple pneumonia and pleurisy ¹	380.5	3.7	2	8.8
96 Bronchitis and asthma ¹	181.5	1.8	9	7.1
112 Percutaneous cardiovascular procedures.....	131.5	1.3	18	6.1
121 Circulatory disorders with acute myocardial infarction and cerebrovascular complications, discharged alive.....	146.2	1.4	13	9.6
124 Circulatory disorders except acute myocardial infarction, with cardiac catheterization and complex diagnosis.....	125.7	1.2	19	5.8
127 Heart failure and shock.....	612.8	5.9	1	7.7
138 Cardiac arrhythmia and conduction disorders ²	188.4	1.8	8	5.9
140 Angina pectoris.....	346.5	3.3	3	4.5
148 Major small and large bowel procedures ²	143.9	1.4	14	15.9
174 Gastrointestinal hemorrhage ²	168.1	1.6	10	7.0
182 Esophagitis, gastroenteritis, and miscellaneous digestive disorders ¹	261.2	2.5	6	6.3
209 Major joint and limb reattachment procedures—lower extremity.....	271.6	2.6	5	10.6
296 Nutritional and miscellaneous metabolic disorders ¹	215.3	2.1	7	8.4
320 Kidney and urinary tract infections ¹	165.2	1.6	12	8.4
410 Chemotherapy without acute leukemia as secondary diagnosis.....	124.3	1.2	20	3.6
416 Septecemia, age greater than 17.....	138.3	1.3	16	10.4

¹ Age greater than 17, with complications.² With complications.

Source: 57 FR 39924–39943.

Until May 1, 1986, the index was based on compensation and employment data for hospital workers, for calendar year 1981, as reported to the Bureau of Labor Statistics in the U.S. Department of Labor. The wage index reflected average hospital wages in each urban and rural area as a percentage of the national average hospital wage. However, because many hospitals relied on varying proportions of part-time employment, there was a concern that the wage index tended to understate actual levels of hospital hourly wage rates in facilities that relied heavily on part-time workers.

In final regulations published on September 1, 1987 (52 FR 33039, Sept. 1, 1987), the Secretary changed the method of calculating the national average wage level, and updated the wage index data. The national average wage level was calculated by dividing national aggregate wages and salaries by the national aggregate number of paid hours of hospital employment. Under this method, the index as a whole was not likely to be sensitive to minor changes in the data for individual labor market areas.

Public Law 100-203 (OBRA 1987) required the Secretary to update the wage index by October 1, 1990, and at least every 3 years thereafter. Updates are to be based on a periodic survey of the wages and wage related costs of PPS hospitals. To the extent feasible, the survey must be designed to measure earnings and hours of paid employment by occupational category, and to permit exclusion of the wages and wage related costs hospitals incur in providing skilled nursing facility services.

OBRA 1989, required the Secretary to update the area wage index annually, beginning in fiscal year 1993, in a budget neutral manner.

For discharges occurring on or after January 1, 1991, and before October 1, 1993, OBRA 1990 requires the use of a wage index based solely on a 1988 wage survey. OBRA 1990 requires the Secretary to apply the wage index without regard to previous surveys of wages and wage-related costs. Tables 19, 20 and 21, at the end of this appendix, give the current wage index values for each metropolitan area and for rural areas in each state.

The calculation of the index begins with the area average hospital hourly wage. For each MSA or non-MSA area (i.e., all non-MSA counties in a State) total county compensation and total paid hours data are summed separately over all counties included in the area. Then aggregate hospital compensation for the area is divided by aggregate paid hours of hospital employment in the area to produce the area average hourly wage. The hospital wage index is calculated by dividing the average hourly wage for each area by the national average hourly wage (determined by dividing national aggregate compensation by national aggregate paid hours of employment).

This procedure results in an index number, such as 0.8735 (Asheville, North Carolina) or 1.2257 (Sacramento, California) for each MSA or non-MSA area in the United States. Since the national average wage level is represented by an index value of 1.000, the wage index value for any area has a direct and simple interpretation. The value of 1.2257 for Sacramento means that the average hourly wage rate for hospital workers is 22.57 percent higher in the Sacramento MSA than the national average hourly wage rate.

Thus, in computing the Federal portion of the hospital payment rates applicable for hospitals in the Sacramento MSA, the labor-related component of the national large urban adjusted standardized payment amount (\$2,588.38) is multiplied by 1.2257 in order to adjust for the higher level of hospital hourly wage rates in this area. Similarly, the calculation of the Federal portion of the rates for hospitals in Asheville would involve a reduction in the published labor-related component of the national adjusted standardized payment amount, to reflect the fact that average hourly wage levels in this MSA are 12.65 percent lower than the national average (as indicated by the wage index value of 0.8735).

SAMPLE PAYMENT CALCULATION

The Federal large urban, other urban, and rural base payment amounts per discharge for fiscal year 1993 were published in the Federal Register on September 1, 1992 (see table 3). Although Federal urban and rural payment amounts are included for each region, after November 21, 1987, the regional amounts are applied in determining payment rates only for sole community hospitals and hospitals located in regions affected by the regional floor.

Each payment amount is divided into a labor-related component and a nonlabor related component. The sum of these components represents the base payment amount that would apply for a hospital located in an area with a wage index of 1.0 (i.e., average wage rates for hospital workers in the area match the national average of hospital wage rates across all areas).

The basic payment to a hospital for a case in a particular DRG is the applicable national (or in some cases, a blend of the national and regional) payment amount, adjusted by the local wage index value and multiplied by the weighting factor for the DRG.

For an example of a payment calculation, assume a hospital is located in Washington, D.C. Such a hospital would be in a large urban area in census region 3. As this is not one of the regions affected by the regional floor, payment is based on the large urban national standardized amount. First the labor-related portion of this amount (\$2,588.38 in fiscal year 1993) is multiplied by the appropriate wage index (1.0936 for Washington, D.C.):

$$\$2,588.38 \times 1.0936 = \$2,830.65$$

To this total is added the nonlabor-related portion of the standardized amount:

$$\$2,830.65 + \$1,066.39 = \$3,897.04$$

For each discharge this new total is then multiplied by the relative weight for the DRG to which the case has been assigned. These weights range from a low of 0.1486 for DRG 382 (false labor) to a high of 20.1614 for DRG 480 (liver transplant). The payment rates for the sample hospital in fiscal year 1991 would therefore vary from a low of \$579.10 ($\$3,897.04 \times 0.1486$) to a high of \$78,569.83 ($\$3,897.04 \times 20.1614$). This payment would be reduced by the Medicare inpatient deductible amount (\$676 per spell of illness in calendar 1993).

TABLE 3.—REGIONAL AND NATIONAL ADJUSTED STANDARDIZED AMOUNTS, LABOR/
NONLABOR, FISCAL YEAR 1993

[In dollars]

	Large urban		Other urban		Rural	
	Labor related	Nonlabor related	Labor related	Nonlabor related	Labor related	Nonlabor related
New England (CT, ME, MA, NH, RI, VT)	2,718.22	1,113.53	2,675.18	1,095.89	2,903.21	1,002.29
Middle Atlantic (PA, NJ, NY)	2,442.07	1,054.94	2,403.41	1,038.24	2,783.27	947.50
South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)	2,606.83	973.59	2,565.55	958.18	2,660.69	821.62
East North Central (IL, IN, MI, OH, WI)	2,749.57	1,151.92	2,706.04	1,133.68	2,694.30	913.15
East South Central (AL, KY, MS, TN)	2,501.84	881.57	2,462.22	867.62	2,637.01	766.17
West North Central (IA, KS, MN, MO, NB, ND, SD)	2,607.57	1,049.59	2,566.29	1,032.98	2,562.99	818.54
West South Central (AR, LA, OK, TX)	2,592.57	967.00	2,551.51	951.70	2,458.00	752.76
Mountain (AZ, CO, ID, MT, NV, NM, UT, WY)	2,500.91	1,035.78	2,461.31	1,019.39	2,485.70	865.78
Pacific (AK, CA, HI, OR, WA)	2,432.68	1,183.17	2,394.18	1,164.44	2,417.56	975.34
Puerto Rico ¹	2,327.98	484.16	2,291.12	476.50	1,786.74	385.18
National	2,588.38	1,066.39	2,547.40	1,049.51	2,621.30	844.54

¹ For calculating Puerto Rico's payments, a separate national adjusted standardized amount is used. Puerto Rico's payments are a blend of the Puerto Rico specific amount and a special national amount. The labor-related amount is \$2,581.80 and the nonlabor-related amount is \$1,004.12.

Source: 57 FR 39846.

In addition to the basic payment for each case, additional payments may be made to teaching hospitals and hospitals that serve a disproportionate share of low-income patients. Any hospital may receive additional payments for outliers (cases with extraordinarily high costs or a very long stay, relative to other cases in the DRG) and for treatment of beneficiaries with end stage renal disease. Finally, certain hospital costs, such as those related to capital, are excluded from PPS and reimbursed separately. The next sections of this appendix discuss additional PPS payments and the separate reimbursement of excluded costs.

ADDITIONAL PAYMENT AMOUNTS

In addition to the DRG prospective payment rates, Medicare payments are made to hospitals for the following items or services:

Graduate medical education

Financing of graduate medical education, the period of training following medical school, is provided predominately through inpatient revenues (both hospital payments and faculty physician fees) and a complex mix of Federal and State government funds. The Federal Government is the largest single explicit financing source for graduate medical education through the Medicare program and

through its support of residencies in Veterans Administration. Medicare recognizes the costs of graduate medical education under two mechanisms: direct medical education payments and an indirect medical education adjustment. In fiscal year 1992, Medicare paid approximately \$1.6 billion in direct medical education payments and \$3.6 billion in indirect adjustments.

Direct medical education costs

The direct costs of approved medical education programs (such as the salaries of residents and teachers and other education costs for residents, and for nurses, and allied health professionals trained in provider-operated programs) are excluded from the prospective payment system. The direct medical education costs for the training of nurses and allied health professionals in provider-operated programs are paid for on a reasonable cost basis.

Public Law 99-272 (COBRA), replaced reasonable cost reimbursement for graduate medical education through residency training programs for physicians, with formula payments based on each hospital's per resident costs. Medicare's payment to each hospital equals the hospital's cost per full-time equivalent (FTE) resident, times the weighted average number of FTE residents, times the percentage of inpatient days attributable to Medicare Part A beneficiaries. Each hospital's per FTE resident amount is calculated using data from the hospital's cost reporting period that began in fiscal year 1984, increased by 1 percent for hospital cost reporting periods beginning July 1, 1985, and updated in subsequent cost reporting periods by the change in the CPI. The number of FTE residents is calculated at 100 percent after July 1, 1986, only for residents in their initial residency period (i.e., within the minimum number of years of formal training necessary to satisfy specialty requirements for board eligibility plus 1 year, but not to exceed 5 years). For residents not in their initial residency period, the weighing factor is 75 percent before July 1, 1987, and 50 percent after that date. On or after July 1, 1986, residents who are foreign medical graduates are not to be counted as FTE residents unless they have passed certain designated examinations.

HHS issued final regulations implementing the COBRA payment changes for graduate medical education costs on September 29, 1989. The changes are effective retroactively to 1985. OBRA 1990, prohibits the Secretary from recouping overpayments to hospitals resulting from the COBRA payment changes for graduate medical education until October 1, 1991. In addition, the act limits the amount of the recoupment to 25 percent of the total overpayment in each of four years beginning in fiscal year 1992.

In addition, Public Law 101-508 provides for a freeze in the update applicable for graduate medical education per-resident payment amounts for portions of cost reporting periods occurring from October 21, 1990, through December 31, 1990.

Hospital-based nursing and allied health professionals education programs operated at a hospital but controlled by another institution were included in PPS payment rates until an exception was enacted in TAMRA, allowing hospitals paid under a demonstration waiver to receive reasonable cost reimbursement for the costs of the nursing school. Public Law 101-239 allowed such hospitals to

continue to be reimbursed on a reasonable cost basis if, before June 15, 1989, and thereafter, the hospital incurred substantial costs in training students and operating the school, the nursing school and hospital share some common board members, and all instruction is provided at the hospital or in the immediate proximity of the hospital. In addition, hospitals paid under the TAMRA exception will be allowed to be reimbursed for reasonable costs of training nursing students retroactively for hospital cost reporting periods beginning in fiscal year 1986.

OBRA 1990 provides for payment on a passthrough basis (exempt from PPS) to hospitals for the clinical training of nurses or allied health education programs that are hospital-supported, as distinct from hospital-operated. The act requires hospitals to meet specific requirements to qualify for such payments, including the requirement that hospitals must have claimed and been paid for such costs prior to October 1, 1989. The Secretary is prohibited from recouping overpayments made to such hospitals and is required to refund any overpayments already recouped.

Indirect medical education costs

Additional payments are made to hospitals under the prospective system for the indirect costs attributable to approved medical education programs. These indirect costs may be due to a variety of factors, including the extra demands placed on the hospital staff as a result of the teaching activity or additional tests and procedures that may be ordered by residents. Congressional reports on the PPS authorizing legislation indicate that the indirect medical education payments are also to account for factors not necessarily related to medical education which may increase costs in teaching hospitals, such as more severely ill patients, increased use of diagnostic testing, and higher staff-to-patients ratios.

The additional payment to a hospital is based on a formula that provides an increase of approximately 7.7 percent in the Federal portion of the DRG payment, for each 0.1 increase in the hospital's intern and resident to bed ratio on a curvilinear or variable basis (i.e., the increase in the payment is less than proportional to the increase in the ratio of interns and residents to bed size).

Public Law 100-647 extended the 7.7 percent indirect medical education adjustment until October 1, 1995. Public Law 101-508 makes the indirect medical education adjustment of 7.7 percent permanent.

Disproportionate share hospitals

Public Law 99-272 (COBRA) provided that additional payments would be made to hospitals that serve a disproportionate share of low-income patients; the adjustment was extended until October 1, 1990, by OBRA 1987 (Public Law 100-203) and to October 1, 1995 by Public Law 100-647, the Technical and Miscellaneous Revenue Act (TAMRA) of 1988. A hospital's disproportionate patient percentage is defined as the hospital's total number of inpatient days attributable to Federal Supplemental Security Income Medicare beneficiaries divided by the total number of Medicare patient days, plus the number of Medicaid patient days divided by the total patient days.

Public Law 101-508 (OBRA 1990), revised the formulas for computing the disproportionate share adjustment, effective January 1, 1991. Table 4 shows the minimum disproportionate patient percentages required to qualify for the adjustment and the formulas for computing the adjustment effective January 1, 1991.

OBRA 1990 provides for additional increases in disproportionate share hospital payments beginning in fiscal year 1994 for urban hospitals with 100 or more beds. For discharges occurring on or after October 1, 1993, such hospitals with a disproportionate patient percentage over 20.2 percent are scheduled to receive payments based on the following formula: $(P-20.2)(.8) + 5.88$; hospitals with a disproportionate patient percentage between 15 and 20.2 are scheduled to receive payments based on the formula: $(P-15)(.65) + 2.5$.

TABLE 4.—CRITERIA TO QUALIFY FOR DISPROPORTIONATE SHARE ADJUSTMENT AND FORMULAS FOR COMPUTING ADDITIONAL PAYMENT, EFFECTIVE JANUARY 1, 1991

Type of hospital	Qualifying disproportionate patient percentage (P)	Formula or fixed percentage adjustment
Urban, 100 or more beds ...	15 percent.....	$(P-15)(.6) + (2.5)$
Urban, 100 or more beds ...	20.2 percent.....	$(P-20.2)(.7) + (5.62)$
Urban, 100 or more beds ...	30 percent of inpatient revenue from State or local indigent care funds.	35 percent
Urban, under 100 beds.....	40 percent.....	5 percent
Rural, over 500 beds.....	Not specified in law; regulations set threshold at 15 percent.	Same as urban, 100 or more beds
Rural, over 100 beds.....	30 percent.....	4 percent
Rural, under 100 beds.....	45 percent.....	4 percent
Rural, sole community hospital.	30 percent.....	10 percent
Rural, rural referral center and—		
(a) not a sole community hospital, 100 or more beds.	30 percent.....	$(P-30)(.6) + 4.0$
(b) not a sole community hospital, under 100 beds.	45 percent.....	$(P-30)(.6) + 4.0$
(c) also a sole community hospital.	30 percent.....	Greater of 10 percent or $(P-30)(.6) + 4.0$

Note: The disproportionate patient percentage (P) is equal to the sum of (a) the number of Medicare inpatient days provided to Supplemental Security Income recipients divided by total Medicare patient days, and (b) the number of inpatient days provided to Medicaid beneficiaries divided by total inpatient days.

Source: Congressional Research Service.

ESRD beneficiary discharges

Effective with cost reporting periods beginning on or after October 1, 1984, additional payments are made to hospitals for inpatient dialysis provided to end-stage renal disease (ESRD) beneficiaries if total discharges of such beneficiaries from non-ESRD related DRGs account for 10 percent or more of the hospital's total Medicare discharges. A hospital meeting the criteria is paid an additional payment for each ESRD beneficiary discharge based on the estimated weekly cost of dialysis and the average length of stay of its ESRD beneficiaries.

Outliers

Additional amounts are paid to hospitals for atypical cases (known as "outliers") which have either extremely long length of stay (day outliers) or extraordinarily high costs (cost outliers) compared to most discharges classified in the same DRG. The law re-

quires that total outlier payments to all hospitals covered by the system represents no less than 5 percent and no more than 6 percent of the total estimated PPS payments for the fiscal year. Effective with discharges occurring on or after October 1, 1984, a transferring hospital may qualify for an additional payment for extraordinarily high-cost cases meeting the criteria for cost outliers. Outlier payments are financed by an offsetting overall reduction in the Federal portion of the base payment amount per discharge. Effective October 1, 1986, Public Law 99-509 established separate urban and rural set-aside factors for financing outlier payments. The separate set-aside factors for rural and urban hospitals for financing outlier payments will end when the other urban/rural payment differential is phased out in fiscal year 1995, as enacted in OBRA 1990.

Public Law 100-203 increased payments for outlier cases classified in DRGs relating to patients with burns from April 1, 1988, through September 30, 1989. This legislation also prohibited the Secretary from issuing any final regulations before September 1, 1988, which changed the method of payment for outlier cases (other than burn cases).

The Secretary published new outlier rules on September 30, 1988, effective for discharges on or after October 1, 1988. The new rules modified the thresholds used in determining whether a case is an outlier and increased the allowable payment amounts for cost outliers. The effect of the changes increased the proportion of all outlier payments going to cost outliers. Previously, about 85 percent of outlier payments were made for length of stay outliers and 15 percent for cost outliers. Under the new rules, 60 percent of payments are made for cost outliers and 40 percent for length of stay outliers. (Cases that meet both length of stay and cost outlier criteria are paid under the policy that produces the higher payment.)

To determine the amount of additional payments for outlier cases, the length of stay (LOS) for each case in a DRG is first compared against the applicable LOS threshold for the category. If the LOS for a case exceeds the threshold, then the case qualifies as a day outlier. In this instance, the hospital is paid its regular payment rate per discharge (for this DRG), plus the Federal portion of a per diem amount (60 percent of the hospital's Federal per diem rate for the DRG) for each Medicare covered day above the LOS threshold.

If the case does *not* qualify as a day outlier, then it may qualify as a cost outlier. The case will qualify for extra payments on this basis if the hospital's Medicare covered charges for the case, adjusted to operating costs (and reduced by its indirect teaching and disproportionate share adjustments, if applicable), exceed its cost outlier threshold for the DRG. In this instance, the hospital is paid its regular payment rate per discharge for the DRG, plus the Federal portion of 75 percent of the difference between its adjusted (and reduced) charges for the case and the cost outlier threshold.

In October 1991, Medicare began a transition from cost-based to prospective payment for hospital capital expenses (see below). In the August 30, 1991, final rule implementing this change, the Secretary established a unified outlier payment system for capital and operating costs. For day outliers, payments for covered days were

set equal to 60 percent of the combined per diem operating and capital payment rates for the DRG. For cost outliers, payments are made only if the combined operating and capital cost for the case exceed the cost outlier threshold for the DRG. As in the case of operating cost payments, standard Federal capital payment amounts are reduced to establish a pool for outlier payments.

In a final rule dated September 1, 1992, the Secretary changed the payment rule for day outliers, effective for discharges occurring on or after October 1, 1992. Payments for covered days are now set at 55 percent (rather than 60 percent) of the combined per diem operating and capital payment rates for the DRG.

Table 5 shows the changes in outlier policy that have occurred during the last 7 years of the PPS.

TABLE 5.—OUTLIER POLICY PARAMETERS, FISCAL YEARS 1987–93

	1987	1988	1989 ¹	1990	1991	1992	1993
Pool target	5.4% (urban) (rural)	5.6% (urban) (rural)	5.6% (urban) (rural)	5.6% (urban) (rural)	5.5% (urban) (rural)	5.6% (urban), 2.1% (rural), 5.0% (capital)	5.5% (urban), 2.2% (rural), 5.0% (capital)
Federal portion.....	75.0%	100.0%	100%	100%	100%	100% (90% capital)	100% (80% capital)
Length of stay	Lesser of 17 days or 1.94 x S.D.	Lesser of 18 days or 2.00 x S.D.	Lesser of 24 days or 3.00 x S.D.	Lesser of 28 days or 3.00 x S.D.	Lesser of 29 days or 3.0 x S.D.	Lesser of 32 days or 3.0 x S.D.	Lesser of 23 days or 3.0 x S.D.
Cost thresholds.....	Greater of 2.0 x DRG Federal rate or \$13,500	Greater of 2.0 x DRG Federal rate or \$14,000	Greater of 2.0 x DRG Federal rate or \$28,000	Greater of 2.0 x DRG Federal rate or \$34,000	Greater of 2.0 x DRG Federal rate or \$35,000	Greater of 2.0 x DRG Federal rate or \$44,000 ³	Greater of 2.0 times DRG Federal rate or \$35,500. ³
Cost-to-charge ratio used for cost outliers.	66.0%	66.0%	Hospital-specific	Hospital-specific	Hospital-specific	Hospital-specific	Hospital-specific.
Marginal cost factor	60.0%	60.0%	60.0% (length of stay), 75.0% (cost)	60.0% (length of stay), 75.0% (cost)	60% (length of stay) 75% (cost)	60% (length of stay) 75% (cost)	55% (length of stay), 75% (cost).

¹ Effective for discharges after October 31, 1988. For discharges between October 1 and October 31, 1988, transitional thresholds applied as follows: length of stay, lesser of 22 days or 2 standard deviations; cost, greater of 2 times Federal rate or \$23,750.

² The LOS threshold for a DRG is set at the lesser of the national average LOS for all cases in the DRG plus a fixed number of days (e.g., 17 days in fiscal year 1987) or the national average LOS for the DRG plus a fixed number of standard deviations (e.g., 1.94 SD in fiscal year 1987). The number of days represented by a fixed number of standard deviations varies among the DRG categories.

³ Combined operating/capital cost threshold.

Source: Annual Federal Register notices.

PAYMENTS ON A REASONABLE COST BASIS

Costs for certain items are excluded from the prospective payment system and thus are not included in the prospective payment rates. Medicare pays for its share of the following costs according to the former reasonable cost-based system:

Capital-related costs

Until fiscal year 1992, Medicare paid its proportionate share of hospitals' reasonable capital-related costs, based on services used by beneficiaries as a proportion of total services furnished by the hospital. (Payments in recent years have been subject to fixed percentage reductions to be described below.) Four basic types of costs are allowable for Medicare reimbursement:

- (1) Interest on mortgages, bonds, or other borrowing used to finance capital investments or current operations. Interest costs are generally offset by any interest income earned by the hospital on investments.
- (2) Depreciation, figured on a straight line basis, for plant and equipment, but not for land.
- (3) Rental payments for plant and equipment.
- (4) Property taxes and insurance premiums related to capital assets.

One other type of capital cost was formerly recognized under Medicare, but has not been reimbursable for hospital services since fiscal year 1989: return on equity for investor-owned hospitals. Return on equity payments provided a return to investors equivalent to what they would have earned if they had used their money for some other purpose.

When the new PPS system was enacted in 1983, Congress excluded capital costs. However, the Secretary was instructed to report to Congress on methods for including capital in PPS and was authorized (but not required) to implement prospective payment for capital on or after October 1, 1986.

The Secretary's authority to include capital in PPS was postponed twice. The Supplemental Appropriations Act of 1986 (Public Law 99-349) delayed prospective capital payment until October 1, 1987. The Omnibus Budget Reconciliation Act of 1987 (Public Law 100-203) delayed prospective payment until October 1, 1991. However, the Secretary was required, not merely authorized, to implement a prospective system by that date. The system was required to provide for capital payments to be made on a per-discharge basis, with adjustments based on each discharge's classification under the DRGs or some similar system. At the Secretary's discretion, the system could include adjustments to reflect variations in costs of construction or borrowing, exceptions (including exceptions for hospitals with existing obligations), and adjustments to reflect hospital occupancy rates.

While prospective payment for capital has been delayed, Congress has included in budget reconciliation legislation fixed percentage reductions in amounts otherwise payable by Medicare for capital costs. These cuts began in fiscal year 1987, with a 3.5 percent reduction. Medicare would compute its share of total costs for each hospital and then reduce that computed share by 3.5 percent.

The percentage reduction increased to 7 percent for the first quarter of fiscal year 1988, 12 percent for the rest of that fiscal year, and 15 percent for fiscal year 1989 through fiscal year 1991. (Delays in completing budget legislation have meant that there were brief intervals in 1987 and 1989 when no reduction was taken). The reductions originally applied only to capital costs related to inpatient care. Beginning in fiscal year 1990, capital payments for outpatient hospital services were also reduced. (The reductions did not apply to certain types of rural hospitals defined in Medicare law, including sole community hospitals, essential access community hospitals, and rural primary care hospitals.)

The Omnibus Budget Reconciliation Act of 1990 (Public Law 101-508) continued capital payment reductions through fiscal year 1995, with the reduction percentage lowered to 10 percent for fiscal year 1992 through 1995. Because prospective payment began in fiscal year 1992, the reductions are not applied directly to each hospital's computed capital costs. Instead, the Secretary is required to set payments under the new system (or under the new system and PPS combined) in such a way as to achieve an aggregate capital spending reduction of 10 percent, as compared to what would have been spent under the reasonable cost system.

The administration's proposed rules for prospective payment for capital costs were published in the Federal Register on February 28, 1991. After a period for public comment, final rules were published on Aug. 30, 1991. The final rule provides for a 10-year transition to fully prospective payment beginning October 1, 1991.

Under the rule, the Secretary establishes a standard per case capital payment rate, based on average capital costs per case in fiscal year 1989 and updated for inflation and other factors. The base rate is adjusted in order to meet the requirement that capital payment rates be set in such a way as to achieve an aggregate saving of 10 percent relative to what would have been paid under a full cost system. For fiscal year 1993 the standard Federal payment rate for capital is \$417.29 (\$320.99 in Puerto Rico). Rates are adjusted using the DRG weights and a geographic factor based on area wage indices.

Hospitals in large urban areas receive a 3 percent increase and hospitals in Alaska and Hawaii receive a cost of living adjustment. A disproportionate share adjustment will be provided for urban hospitals with more than 100 beds. A hospital will receive approximately a 2.1 percent point increase in capital payments for each 10 percent increment in its disproportionate share percentage.

An adjustment will also be issued for the indirect costs of medical education. Their adjustment will be based on the ratio of residents to average daily inpatient census. Capital payments increase approximately 2.8 percentage points for each 10 percent increment in the residents to average daily census ratio. Additional capital payments are issued for outlier cases.

During a transition period that ends September 30, 2000, each individual hospital's capital payment rate is a blended rate based partly on its own historic capital costs and partly on the Federal rate. In fiscal year 1993, rates are 80 percent hospital-specific and 20 percent Federal. The hospital-specific portion will drop by 10

percent a year, until fully Federal rates take effect in fiscal year 2001.

The transition rules include two provisions to assist hospitals most disadvantaged by the shift to prospective payment: a "hold harmless" payment system and exception payments for certain facilities. Hospitals whose base year capital costs are above average continue to be paid on a cost basis for the portion of their costs related to "old" capital investments (generally assets put in use or obligated by the end of 1990). The rest of the hospital's capital payments are based on the prospective rates. For example, if 75 percent of a hospital's costs are for depreciation and interest on a pre-1990 building, the hospital is paid Medicare's share of those costs (subject to the current 10 percent reduction). For "new" capital, it receives a portion of the prospective rate based on the hospital's own ratio of new to total capital. In this case, because old capital accounts for 75 percent of costs, the hospital's new capital payment is 25 percent of the prospective rate for each case treated. This hold harmless payment system will continue until the end of the 10-year transition, or until a hospital's old capital costs drop to the point at which it is more advantageous for the hospital to shift to fully prospective payment.

Exception payments are made to hospitals whose capital payments under the new system fall significantly short of their actual capital costs. Most hospitals are assured of receiving a minimum of 70 percent of costs. Specified urban hospitals with a disproportionate share of low-income patients receive at least 80 percent of costs, and rural sole community hospitals at least 90 percent. Computation of exception payments is cumulative. If a hospital received more than the minimum in one year but a shortfall the next, the surplus from the first year would be applied before any additional payment would be made in the second year.

Table 6 shows the distribution of estimated total capital payments to PPS hospitals by geographic location and type of hospital for fiscal year 1991.

Table 7 shows two sets of projections of the level and the rate of increase of aggregate payments and payments per case for capital-related costs in fiscal years 1984 through 1998.

Both sets of projections for capital reflect recently enacted provisions which phase out payments for a return on equity capital for proprietary providers. The second set also includes the anticipated effects of statutory reductions in reimbursements for capital-related costs (i.e., 3.5 percent for portions of cost-reporting periods in fiscal year 1987, 12 percent for fiscal year 1988, 15 percent for fiscal year 1989 and the last three quarters of fiscal year 1990, 15 percent in fiscal year 1991, and 10 percent for fiscal years 1992-1995) enacted in the Omnibus Budget Reconciliation Act of 1986 (Public Law 99-509), in the Omnibus Budget Reconciliation Act of 1987 (Public Law 100-203), in the Omnibus Budget Reconciliation Act of 1989 (Public Law 101-239), and in the Omnibus Budget Reconciliation Act of 1990 (Public Law 101-508). The second set of estimates in table 7 also include the effect of regulations implementing prospective payment for inpatient capital-related costs (effective in fiscal year 1992), including the budget neutrality requirement through fiscal year 1995 enacted in OBRA 1990.

TABLE 6.—CAPITAL-RELATED PAYMENTS TO PPS HOSPITALS (INCURRED AMOUNTS FOR FISCAL YEAR 1991)

	Capital payments ¹ (in millions)	PPS and capital payments ² (in millions)	Capital payments as a percent of PPS and capital payments
All hospitals.....	\$6,220	\$59,460	10.5
Urban	5,270	50,880	10.4
Rural	940	8,580	11.0
MSA > 1 million ³	2,900	28,370	10.2
Other urban.....	2,380	22,520	10.6
Rural referral.....	300	2,850	10.6
Rural sole community ⁴	120	1,060	11.5
Other rural	520	4,670	11.1
Major teaching ⁵	700	8,760	8.0
Other teaching.....	2,180	21,890	10.0
Nonteaching	3,330	28,820	11.6
Disproportionate share:			
MSA > 1 million.....	1,170	12,240	9.5
Other urban.....	1,120	10,860	10.3
Rural.....	140	1,320	10.4
Nondisproportionate share:			
MSA > 1 million.....	1,730	16,120	10.7
Other urban.....	1,260	11,660	10.8
Rural.....	800	7,250	11.1
New England.....	290	3,580	8.2
Middle Atlantic	1,020	11,560	8.8
South Atlantic	1,040	9,080	11.4
East North Central.....	1,070	10,390	10.3
East South Central.....	460	3,910	11.8
West North Central.....	470	4,300	10.9
West South Central	730	5,720	12.8
Mountain	300	2,520	11.7
Pacific.....	840	8,410	10.0
Urban:			
< 100 beds.....	320	2,660	12.0
101–200 beds	1,010	8,290	12.2
201–400 beds	2,330	22,130	10.5
401+ beds	1,620	17,800	9.1
Rural:			
< 50 beds.....	150	1,540	9.5
51–100 beds	270	2,400	11.1
101–200 beds	340	2,820	12.2
201+ beds	190	1,820	10.2

TABLE 6.—CAPITAL-RELATED PAYMENTS TO PPS HOSPITALS (INCURRED AMOUNTS FOR FISCAL YEAR 1991)—Continued

	Capital payments ¹ (in millions)	PPS and capital payments ² (in millions)	Capital payments as a percent of PPS and capital payments
Voluntary.....	4,450	43,930	10.1
Proprietary	1,050	7,460	14.0
Urban government.....	500	5,870	8.4
Rural government.....	220	2,200	10.0

¹ Capital payments are the incurred payments to hospitals covered by the prospective payment system (PPS) for capital-related expenses. For fiscal year 1991, capital payments will be equal to 85 percent of the reasonable cost of Medicare capital-related expenses for all PPS hospitals except sole community hospitals. For these hospitals, capital payments will equal 100 percent of Medicare capital-related expenses.

² Payments are equal to PPS payments for the operating expenses associated with providing inpatient services to Medicare beneficiaries (i.e., those payments based on diagnosis-related groups and adjusted for "disproportionate share," the indirect costs related to teaching, and other factors) plus capital payments to PPS hospitals. Payments to PPS hospitals for the direct costs of graduate medical education, and other "passthroughs" are not included. PPS payments plus capital payments equal over 95 percent of total Medicare payments to PPS hospitals for hospital inpatient services.

³ MSA > 1 million indicates hospitals located in Metropolitan Statistical Areas with populations of more than 1 million.

⁴ Sole community hospitals that are also rural referral hospitals are included in the rural referral category.

⁵ Major teaching hospitals are those hospitals for which the ratio of the number of full-time equivalent interns and residents to the number of beds is .25 or larger.

Source: Congressional Budget Office estimates based on data from the Health Care Financing Administration and other sources.

Physicians in teaching hospitals

If a teaching hospital so elects, the direct medical and surgical services of physicians in such hospitals will be excluded from the prospective payment system and paid for on the basis of reasonable costs.

TABLE 7.—ESTIMATED OUTLAYS FOR INPATIENT CAPITAL-RELATED COSTS UNDER MEDICARE'S HOSPITAL INSURANCE PROGRAM, FISCAL YEARS 1984–98 ¹

	Without OBRA 1986, 1987, 1989, 1990 percentage reductions and without Aug. 30, 1991 regulation			With OBRA 1986, 1987, 1989, 1990 percentage reductions and with Aug. 30, 1991 regulation ²		
	Aggregate payments (billions)	Year to year percent increase	Payments per case	Aggregate payments (billions)	Year to year percent increase	Payments per case
Fiscal year:						
1984.....	\$3.6	NA	\$315	\$3.6	NA	\$315
1985.....	4.2	15.0	385	4.2	14.6	385
1986.....	4.6	10.3	440	4.6	10.3	440
1987.....	4.8	4.9	475	4.7	2.0	465
1988.....	5.4	11.8	525	4.9	5.1	480
1989.....	6.0	10.9	585	5.2	5.4	505
1990.....	6.7	12.8	635	5.9	14.1	560
1991.....	7.5	11.8	700	6.4	8.2	595
1992.....	8.6	13.8	765	7.2	13.0	645
1993.....	9.6	11.6	825	8.2	12.9	705
1994.....	10.7	11.7	895	9.2	12.3	765
1995.....	11.9	11.5	965	10.3	11.6	830
1996.....	13.2	10.4	1,035	11.4	10.9	890
1997.....	14.5	10.1	1,105	12.5	10.3	955
1998.....	15.9	9.9	1,185	13.8	9.7	1,020

¹ Both projections for capital-related payments reflect current law provisions which phased out payments for return-on-equity capital for proprietary providers during fiscal year 1987 through fiscal year 1989. Estimates are CBO's February 1991, projections.

² Includes freeze at fiscal year 1987 payment levels from Oct. 1, 1987 through Nov. 20, 1987; percentage reductions were 3.5 percent in fiscal year 1987, 12 percent in fiscal year 1988, 15 percent in fiscal year 1989, 15 percent in the last three quarters of fiscal year 1990, 15 percent in fiscal year 1991, and 10 percent for fiscal years 1992–95. Under current law, regulations implementing (effective fiscal year 1992) prospective payment for inpatient capital-related costs will primarily affect the distribution of payments with aggregate levels not to exceed those projected above, for fiscal year 1992 through fiscal year 1995. Final regulation on prospective payment of capital issued on Aug. 30, 1991 implements budget neutrality requirements of OBRA 1990 through fiscal year 1995. Payment rates are updated thereafter by the 2-year moving average increase in Medicare capital costs per case, adjusted for case mix change, that occurred 3 and 4 years previous to the fiscal year in question.

Kidney acquisition costs

The estimated net expenses associated with kidney acquisition in certified renal transplantation centers are excluded from the prospective payment system and paid on a reasonable cost basis.

Passthrough payments for hemophilia inpatients

OBRA 1989 excluded the cost of administering blood clotting factors for hemophilia inpatients from PPS, for items furnished from June 19, 1990 through December 19, 1991. The price per unit for the blood clotting factors was set at a predetermined rate, in consultation with ProPAC, and the cost of administering the blood clotting factors was determined by multiplying a predetermined

price per unit of blood clotting factor by the number of units provided to the individual.

Bad debts of Medicare beneficiaries

An additional payment is made to hospitals for bad debts attributable to unpaid deductible and copayment amounts related to covered services received by Medicare beneficiaries.

The Secretary is prohibited from making any change in the policy in effect on August 1, 1987, including changes in hospital documentation requirements. OBRA 1989 prohibits the Secretary from requiring hospitals to change their bad debt collection policy if a fiscal intermediary accepted the policy in accordance with the rules in effect as of August 1, 1987, for indigency determination procedures, for record keeping, and for determining whether to refer a claim to an external collection agency. For such facilities, the Secretary also may not collect from the hospital on the basis of an expectation of a change in the hospital's collection policy.

SPECIAL TREATMENT OF CERTAIN FACILITIES

Certain exceptions and adjustments to the prospective payment rates are provided as follows:

Sole community hospitals

Sole community hospitals (SCHs) are hospitals that (because of factors such as isolated location, weather conditions, travel conditions, or absence of other hospitals) are the sole source of inpatient services reasonably available in a geographic area. For cost reporting periods beginning before April 1, 1990, SCHs were paid on the same basis as all other hospitals were paid in the first year of the transition period: 25 percent of the payment is based on Federal regional DRG rates and 75 percent on each hospital's cost base.

Under the provisions of OBRA 89, the criteria for SCH designation was liberalized by allowing hospitals to be designated as such if they were located more than 35 road miles from another hospital. In addition, OBRA 89 provided the Secretary with the authority to designate a hospital as an SCH if, by reason of factors such as travel time to the nearest alternative source of appropriate inpatient care, location, weather conditions, travel conditions, or absence of other like hospitals, the Secretary determines that it is the sole source of inpatient hospital services reasonably available to individuals in a geographic area.

In addition, OBRA 1989 established new payment provisions that apply to all SCHs for cost reporting periods beginning after April 1, 1990. An SCH may receive the higher of the following rates as the basis of reimbursement: a target amount based on 100 percent hospital-specific prospective rates based on fiscal year 1982 costs updated to the present; a target amount based on hospital-specific prospective rates based on fiscal year 1987 costs updated to the present; or the Federal PPS rate. Current SCHs not meeting the new criteria are allowed to continue to qualify for payments as an SCH.

OBRA 1989 made permanent the provision by which an SCH may request additional payments if the hospital experiences a de-

crease of more than 5 percent in its total inpatient cases due to circumstances beyond its control. An SCH may receive such payments if it meets sole community hospital criteria but is not being paid as a sole community hospital. As of September 1992, 607 hospitals were classified as sole community providers.

Medicare dependent hospitals

OBRA 1989 created a new classification of hospitals termed Medicare dependent hospitals. Medicare dependent hospitals are hospitals that are located in a rural area, have 100 beds or less, are not classified as a sole community provider, and for which not less than 60 percent of inpatient days or discharges in the hospital cost reporting period that began during fiscal year 1987 were attributable to Medicare. These hospitals are reimbursed in the same fashion as sole community providers during cost reporting periods beginning on or after April 1, 1990, and ending on or before March 31, 1993. As of September 1992, there were 501 Medicare dependent hospitals.

Referral centers

The Secretary is authorized to provide exceptions and adjustments as appropriate for regional and national referral centers. These centers are defined as:

- (1) rural hospitals having 275 or more beds;
- (2) hospitals having at least 50 percent of their Medicare patients referred from other hospitals or from physicians not on the hospital's staff, at least 60 percent of their Medicare patients residing more than 25 miles from the hospital, and at least 60 percent of the services furnished to Medicare beneficiaries are furnished to those who live 25 miles or more from the hospital; or
- (3) rural hospitals meeting the following criteria for hospital cost reporting periods beginning on or after October 1, 1985:
 - (a) a case mix index equal to or greater than the median case mix for all urban hospitals (the national standard), or the median case mix for urban hospitals located in the same census region, excluding hospitals with approved teaching programs. (The case mix index is a measure of the relative costliness of the hospital's mixture of cases among the DRGs compared to the national average mixture of medicare cases);
 - (b) a minimum of 5,000 discharges, the national discharge criterion (3,000 in the case of osteopathic hospitals), or the median number of discharges in urban hospitals for the region in which the hospital is located; and
 - (c) at least one of the following three criteria: more than 50 percent of the hospital's medical staff are specialists, at least 60 percent of discharges are for inpatients who reside more than 25 miles from the hospital, or at least 40 percent of inpatients treated at the hospital have been referred either from physicians not on the hospital's staff or from other hospitals.

Referral centers are paid prospective payments based on the applicable urban payment amount rather than the rural payment

amount, as adjusted by the hospital's area wage index. The applicable amount is the "other urban" rate (i.e., the rate for urban areas with 1 million or fewer people) for all referral centers except those (if any) located in MSAs greater than 1 million.

Under the regulations, once a hospital has achieved referral center status, it is paid at the applicable urban rate for a 3-year period. Public Law 99-509 permitted hospitals designated as regional referral centers, as of the date of enactment, to continue their designation through cost reporting periods beginning before October 1, 1989. OBRA 89 extended the status of current referral centers for three additional years, including all hospitals classified as referral centers as of September 30, 1989. As of September 1992, 180 hospitals were qualified as referral centers.

Hospitals in rural counties treated as urban counties

Hospitals in areas that are reclassified from urban to rural under OMB's MSA system are allowed a 2-year transition period during which they are paid a blend of the applicable urban and rural rates.

Public Law 100-203 provided for the reclassification of rural hospitals as urban if the county in which the hospital was located was adjacent to two or more MSAs and met criteria regarding commuting patterns of its residents to the central counties of the adjacent MSAs. For fiscal year 1993, 50 rural hospitals have been reclassified under this provision. If treating a hospital located in a rural county as being located in an urban area reduced the wage index for that urban area or for other rural areas in the State, Public Law 100-647 required an adjustment to ensure that, for discharges during fiscal year 1990 and 1991, no other area suffered a reduced wage index.

Public Law 101-239 (OBRA 1989) allows hospitals to apply for reclassification from rural to urban and allows counties to apply for reclassification from rural to urban. In addition, OBRA 1989 establishes a floor for area wage indices so that the reclassification of hospitals under the new procedures or the rules enacted in OBRA 1987 cannot result in the reduction of a county's wage index below the wage index for other rural areas within the same State.

Public Law 101-239, requires the Secretary to establish a Geographic Classification Review Board to consider appeals by hospitals for a change in classification from rural to urban, or from one urban area to another urban area. Reclassification may be for use of an adjacent area's standardized amount (large or other urban) or use of its wage index. The Secretary has provided by regulation that a hospital must be in a county adjacent to the area to which it seeks reclassification.

The Act also revises the rules for the adjustment of wage indices required as a result of the reclassification of hospitals under the OBRA 1987 provision or under the new procedures for reclassification. If reclassification of a county into an urban area reduces the wage index for that area by 1 percent or less, then the MSA wage index applies to hospitals in the reclassified county, but the reclassified county is to be excluded from the computation of the index. If the reclassification reduces the urban area's wage index by more than 1 percent, separate wage indices are to be computed for the

original urban area and for the reclassified county. If the reclassification of a rural county results in a reduction in the wage index for the other rural counties in the State, the index is to be computed as if the reclassification had not occurred. Finally, no reclassification can reduce any area's wage index to a level below the index for rural areas in the State. The new rules are effective April 1, 1990.

OBRA 1990 provided that if including wages of all redesignated hospitals in the wage index of the MSA to which they are redesignated reduces the MSA's wage index by more than 1 percentage point, then the original wage index (calculated without the wages of the redesignated hospitals) is applied to hospitals in the MSA. Redesignated hospitals would receive a wage index combining their wages plus the wages of the MSA to which they were redesignated. OBRA 1990 also extended the due date for initial applications for reclassification submitted to the Geographic Classification Review Board until November 6, 1990, and clarifies the Secretary's ability to review decisions of the Board. For fiscal year 1993, 823 rural hospitals (34 percent) and 370 urban hospitals (13 percent) have been reclassified by the Board.

In a final rule issued September 1, 1992, the Secretary provided that, beginning in fiscal year 1994, no hospital may be reclassified for wage index purposes unless its hourly wages equal 108 percent of the average for its current area and 84 percent (90 percent if weighted for occupational categories) of the average for the area to which it seeks reclassification.

Section 602k hospitals

Prior to Public Law 98-21, payments for nonphysician services (in such areas as radiology, laboratory, physical therapy, prosthetics) provided to Medicare beneficiaries who were hospital inpatients were made either (1) to the hospital under part A of Medicare on a reasonable cost basis or (2) to an outside supplier of the service under part B of Medicare on the basis of reasonable charges. The practice of billing under part B for services provided to hospital inpatients is known as the "unbundling" of part A services.

Public Law 98-21 provided that, effective October 1, 1983, for all hospitals participating in the Medicare program (including those under prospective payment, excluded hospitals, and those paid under State cost control systems), all nonphysician services provided to hospital inpatients will be paid only as hospital services under the part A program. The Secretary has authority to waive this requirement during the transition period to allow billing under part B for hospitals that had such extensive billings under part B prior to October 1, 1982, that compliance with the new requirement would threaten the stability of patient care (commonly referred to as 602k hospitals). As of December 1985, there were four 602k hospitals.

HOSPITALS EXCLUDED FROM THE PROSPECTIVE PAYMENT SYSTEM

The following hospitals are by law excluded from the prospective payment system and are paid on the basis of reasonable costs, sub-

ject to the TEFRA rate of increase limits: psychiatric hospitals, rehabilitation hospitals, psychiatric or rehabilitation units which are distinct parts of a hospital, alcohol and drug abuse hospitals and such distinct units of hospitals (for cost reporting periods beginning before October 1, 1987), children's hospitals (with patients averaging under 18 years of age), long-term hospitals (with an average inpatient length of stay greater than 25 days), and hospitals outside the 50 States and the District of Columbia. Public Law 99-509 provided that hospitals located in Puerto Rico will be included in PPS, specially adjusted for Puerto Rico, effective with discharges occurring on or after October 1, 1987. Public Law 101-239 exempts cancer hospitals (hospitals extensively involved in treatment for and research on cancer) classified as such before December 31, 1990, from PPS. In addition, the act provides an exemption for any hospital classified as a cancer hospital before December 31, 1991, that is located in a State that has a PPS waiver under section 1814(b) (i.e., Maryland). In addition, there are special cases where the prospective payment system is not applied, such as for emergency services provided to Medicare beneficiaries in hospitals not participating in Medicare and Veterans' Administration hospital services provided to Medicare beneficiaries.

OBRA 1990 increased the cost limits imposed on hospitals exempt from PPS. Under prior law, hospitals with costs in excess of the cost limits imposed by the Tax Equity and Fiscal Responsibility Act (TEFRA) would be reimbursed for their cost up to the TEFRA limit. Under OBRA 1990, hospitals with costs in excess of the cost limits imposed by TEFRA will receive 50 percent of the costs that are in excess of the limit, up to a maximum of 110 percent of the limit. In addition, the Secretary is directed to develop a new prospective payment methodology for exempt hospitals, or to substantially modify the current target-rate system.

Hospitals reimbursed under approved State cost control systems are also excluded from the prospective rates.

Section 1886(c) of the Social Security Act (as added by TEFRA) gave the HHS Secretary discretion to reimburse hospitals in a State according to the State's hospital reimbursement control system rather than according to Medicare's reimbursement methods if the State requests this change and if HHS determines that the State system meets certain requirements. Currently one State has a waiver to operate its own system: Maryland. New York has a waiver covering four counties participating in the Finger Lakes Area Hospital Corporation (FLAHC) rural hospital payment demonstration.

Public Laws 98-21 and 98-369 added several more requirements for State systems. According to final regulations published by HHS on April 24, 1986 (51 F.R. 15481), implementing these legislative changes, HHS has the discretion to allow Medicare hospital reimbursement to be made in accordance with a State reimbursement control system if the chief executive officer of the State requests approval of the State system, and provided that the State system:

- (a) Applies to substantially all non-federal acute care hospitals in the State.

- (b) Applies to at least 75 percent of all inpatient revenues or expenses for the State.

(c) Provides assurances that payers, hospital employees and patients in the State will be treated equitably under its system.

(d) Provides assurances that its system will not result in greater Medicare expenditures over 36-month periods.

(e) Does not preclude health maintenance organizations (HMOs) or competitive medical plans (CMPs) from negotiating directly with hospitals concerning payment for inpatient services.

(f) Limits hospital charges to Medicare beneficiaries to deductibles, coinsurance, and services for which the beneficiary would not be entitled to have payment made under Medicare part A; and prohibits payment under part B of Medicare for nonphysician services provided to hospital inpatients unless this prohibition is waived.

Public Law 101-239 (OBRA 1989) requires the Secretary's test of effectiveness of a State cost containment system to be based on the aggregate rate of increase from October 1, 1984, to the most recent date for which annual data are available. This provision extends the waiver for the FLAHC rural hospital payment demonstration.

Special provisions apply to States that have existing demonstration projects approved by HCFA under section 402 of the Social Security Amendments of 1967 or section 222(a) of the Social Security Amendment of 1972 for the operation of State reimbursement control systems. HHS approval of a State's application to continue the operation of a system upon expiration of the demonstration project is mandatory if, and for so long as, the system meets the minimum requirements described in items (a) through (f) above.

Public Law 101-508 revises the Secretary's test of effectiveness of a State cost containment system to be based on the rate of increase in costs per hospital inpatient admission as compared to the rate of increase in such costs with respect to all hospitals between January 1, 1981, and the present. In addition, OBRA 1990 provides that a State no longer qualifying for a PPS waiver be provided with a reasonable period, not to exceed two years, for transition from the State system to the national payment system, and requires restoration of the waiver if the State returns to compliance during the transition period.

ADMINISTRATION

Prospective Payment Assessment Commission

Public Law 98-21 required the Director of the Congressional Office of Technology Assessment (OTA) to appoint by April 1, 1984, a commission of 15 independent experts, known as the Prospective Payment Assessment Commission (ProPAC). Public Law 99-272 added two members to ProPAC, bringing the total to 17 members.

The Commission must report to Congress by March 1 of each year its recommendation of an update factor for PPS payment rates and for other changes in reimbursement policy.¹ By June 1 of each year, ProPAC also submits a report to Congress which provides background information on trends in health care delivery

¹ See Prospective Payment Assessment Commission. Report and Recommendation to the Secretary, U.S. Department of Health and Human Services, March 1, 1993.

and financing, including the impact of the prospective payment system on providers and beneficiaries. Prior to 1988, this report to Congress was submitted in February each year. Because the Commission's report and recommendations to the Secretary is due earlier, however, the report to Congress has been rescheduled for June 1, each year.²

The Secretary is required to submit to Congress recommendations that take into account ProPAC's recommendations, and include a written explanation of those recommendations that differ from those of the Commission.

Public Law 101-508 requires ProPAC to study and make recommendations for each fiscal year on Medicare's reimbursement of nonhospital institutional services. In addition, ProPAC is required to include in the June 1 report to Congress an examination of issues affecting health care delivery.

Administrative and judicial review

Administrative and judicial appeals are allowed under procedures and authorities already established under the Medicare program. However, the law precludes administrative and judicial review of: (1) the "budget neutrality" adjustment (see above), and (2) the DRG payment amounts, including the establishment of DRGs, the methodology for classifying discharges within DRGs, and the DRG weighting factors.

Review activities

Public Law 97-248, the Tax Equity and Fiscal Responsibility Act of 1982 (known as TEFRA) replaced the existing Professional Standards Review Organization (PSRO) program with the utilization and quality control peer review program. The Secretary of the Department of Health and Human Services was required to enter into performance-based contracts with physician-sponsored or physician-access organizations known as Peer Review Organizations (PRO's) by November 15, 1984. As a condition of receiving payments under the prospective payment system, hospitals are required to enter into an agreement with a PRO under which the PRO will review the validity of diagnostic and procedural information provided by the hospitals; the completeness, adequacy and quality of care provided; and the appropriateness of admissions patterns, discharges, lengths of stay, transfers, and services furnished in outlier cases.

Since 1982, the statute governing the PRO program has been amended numerous times, and the PROs are now operating under the third "scope of work." In addition to reviewing inpatient care and some ambulatory care services, the PROs are now required to review hospital readmissions within 31 days of a previous hospital discharge to determine if the previous inpatient services and the posthospital services met professionally recognized standards of care. This provision was enacted as part of the Omnibus Budget Reconciliation Act of 1986 (P.L. 99-509), partly in response to congressional concerns that the prospective payment system was en-

² See Prospective Payment Assessment Commission, Medicare Prospective Payment and the American Health Care System. Report to Congress, June 1992.

couraging hospitals to discharge patients prematurely to inappropriate levels of care.

HISTORICAL TRENDS IN PPS PAYMENTS AND HOSPITAL MEDICARE COST, REVENUE, AND UTILIZATION

Aggregate PPS payments

Prospective payment system (PPS) payments for fiscal year 1992 are estimated at \$58.5 billion (see table 8). Of that amount, \$6.1 billion is accounted for by beneficiary deductibles and copayments and payments made by other third-party payers, and \$52.3 billion by payments from the Medicare program. Under current law, PPS payments are expected to exceed \$91.6 billion by fiscal year 1998, with \$81.8 billion coming from the Medicare trust fund and \$9.8 billion from beneficiaries and other payers.

Trends in PPS costs, revenue, and margins

In the following tables, PPS1, PPS2, PPS3, PPS4, PPS5, PPS6 and PPS7 indicate the first through seventh years of the Medicare prospective payment system, respectively. Hospitals were phased into PPS beginning October 1, 1983, depending on when the hospital's accounting or fiscal year began. Thus, PPS1 is the first year of prospective payment for each individual hospital and generally overlaps Federal fiscal years 1984 and 1985.

The increase in the PPS payment rates (the DRG prices) has differed from the update factor each year. For example, in the first 2 years, the PPS payment rates were required to be adjusted so that aggregate payments to hospitals included in PPS would be equal to the aggregate payments they would have received if they had been paid under the provisions of prior law (the target rate of increase limits established in TEFRA, Public Law 97-248). As a result of this budget neutrality adjustment, the actual increases in the DRG prices were lower than the increases provided by the PPS update factors for those years. In the third year, the PPS rates were frozen by the Congress and the update factor of 0.5 percent established in COBRA (Public Law 99-272) applied for only the last 5 months of the fiscal year. Actual increases in the DRG rates in each year also have been affected by changes in policy that required recalculation or adjustment of the Federal base payment amounts or the DRG relative weights.

Actual annual increases in average payments per case, in turn, depend on a variety of factors in addition to the increase in the PPS rates, including the increase in reported case mix and other changes in payment policies.

Following an increase of only 1.9 percent in the first year of PPS, PPS operating costs per discharge rose at a rate of about 10 percent per year during the second and third years, and about 9 percent in the fourth through sixth years (see table 9). Operating costs per discharge rose about 8 percent in the seventh year. PPS payment per discharge increases were substantial during the first 2 years of PPS but were dramatically lower in the next 5 years. In each year, per discharge payment increases were greater than for the PPS market basket index. PPS payments have also grown faster than the update factor, primarily due to the increased fre-

quency of higher-weighted DRGs. The cumulative increases in costs and payments per discharge in the first 7 years of PPS are 73.2 percent and 67.7 percent, respectively (see chart 1).

PPS margins are defined as PPS payments less PPS operating costs divided by PPS payments. The aggregate PPS margin was above 14 percent in each of the first 2 years of PPS, falling to 9.8 percent in the third year 6.9 percent in the fourth year, 4.0 percent in the fifth year, and 1.0 percent in the sixth year and -1.5 percent in the seventh year (see table 10). The seventh year of PPS was the first time in which aggregate PPS operating costs exceeded aggregate payments. Fifty-seven percent of all hospitals incurred losses under PPS during the seventh year, compared with only 17 percent in the first year (see table 11).

PPS margins do not represent the bottom line for the hospital industry. Total margins, which include expenses and revenues related to Medicare and other inpatient and outpatient care as well as other facility activities, increased steadily from the early 1970s to the early 1980s, peaking in 1984. Data from the American Hospital Association's National Hospital Panel Survey indicate that, after a slight decline, the total margin has leveled off. The total margin in 1990, 3.9 percent, is comparable to pre-PPS levels.

Margins by hospital type

PPS margins vary by hospital type. During the first 4 years of PPS, urban hospitals had substantially higher margins than rural hospitals. Within both categories, margins increased with hospital size. The urban/rural margin differential decreased in the fifth year of PPS, because policy changes in recent years have increased payments to rural hospitals relative to urban hospitals. In the seventh year of PPS, both the urban and rural margins were negative, but the difference between the two margins was 2.7 percentage points, compared with 7.4 percentage points in the first year. Major teaching hospitals and large urban hospitals with disproportionate shares of poor patients had relatively high PPS margins during the first 7 years of PPS.

Distribution of PPS hospitals, cases, and payments

Estimates for fiscal year 1992 show that PPS payments continue to vary substantially across hospital groups (see table 12). For example, 53 percent of all PPS hospitals are located in urban areas; these hospitals account for 78 percent of all PPS discharges and receive 85 percent of all PPS payments. By contrast, rural hospitals account for 47 percent of PPS hospitals and 22 percent of PPS discharges, and only 15 percent of PPS payments. By contrast, rural hospitals account for 47 percent of PPS hospitals and 22 percent of PPS discharges, and only 15 percent of PPS payments.

For all PPS hospitals, the basic DRG payment was estimated to account for 85.6 percent of fiscal year 1992 PPS payments (see table 13). Indirect medical education (IME), disproportionate share (DSH), and outlier payments were expected to account for 14.4 percent of all PPS payments, or about \$8 billion.

The IME adjustment is intended to recognize hospitals' indirect costs of operating approved graduate medical education programs. The DSH adjustment is intended to compensate hospitals that treat

large proportions of low-income patients. Almost all IME and DSH payments go to hospitals located in urban areas. In fiscal year 1992, urban hospitals received 98 percent of IME payments and 96 percent of DSH payments. Outlier payments are intended to protect hospitals from the risk of financial losses due to cases with exceptionally long stays or high costs. Large, urban teaching hospitals and those located in the Middle Atlantic region received the highest proportion of outlier payments. Small, rural hospitals and those located in the mountain region received the lowest percentage of outlier payments.

Medicare passthrough payments

Payments for capital and direct medical education expenses are frequently referred to as passthrough payments because at the beginning of PPS, they were paid on a cost reimbursement basis, or "passed through," to Medicare. Beginning in fiscal year 1991, capital payments are made on a prospective per case basis. Direct medical education payments are currently based on a prospective per resident amount.

During the sixth year of PPS, these two categories accounted for 12.4 percent of all Medicare inpatient hospital payments (see table 14). The hospitals with the highest proportion of passthrough payments were predominantly large, teaching, and located in urban areas. In contrast, hospitals with the lowest passthrough payments tended to be small and located in rural areas.

Effects of policy changes on PPS payments

Since the implementation of PPS, the distribution of Medicare payments to hospitals has changed. Some redistribution has resulted from changes in hospital behavior, but much of it is attributable to policy decisions. These include the transition to national average rates, reductions in teaching hospital payments, the addition of a disproportionate share adjustment and increases in the size of that adjustment for many hospitals, and large update factors for rural hospitals in recent years.

The update factor and other policy decisions implemented between fiscal years 1984 and 1992 increased per-case PPS payment rates by 24.9 percent (see table 15). These policy decisions have redistributed PPS payments to rural hospitals, particularly to sole community hospitals. Small rural hospitals have been helped much more than large hospitals in any location, while urban hospitals with fewer than 100 beds have fared worse than most groups. Similarly, major teaching hospitals received relatively little benefit from payment policy changes.

The Medicare case-mix index (CMI) reflects the mix of each hospital's cases across DRGs. Because hospitals are paid on this basis, an increase in the CMI results in a proportional increase in PPS payments. CMI changes have, in some instances, partially offset the intended effects of policy decisions. For example, with case mix change has shifted payments toward urban hospitals, teaching hospitals, and large hospitals.

Additional hospital data

Table 16 displays summary characteristics of hospitals participating in the Medicare program. These data are derived from PPS payment simulations by the Congressional Budget Office.

TABLE 8.—ESTIMATED INCURRED PPS PAYMENTS TO HOSPITALS, BY PAYMENT TYPE,
FISCAL YEARS 1991–98

[In billions]

Payment type	1991	1992	1993	1994	1995	1996	1997	1998
Gross PPS payments ..	\$51.7	\$58.5	\$61.8	\$67.2	\$73.3	\$79.3	\$85.5	\$91.6
Indirect teaching	2.9	3.3	3.5	3.8	4.1	4.5	4.8	5.1
Disproportionate share	2.1	2.3	2.5	2.7	2.9	3.2	3.4	3.7
Outlier ¹	2.3	2.5	3.1	3.4	3.7	4.0	4.3	4.6
Less copayments	(5.7)	(6.1)	(6.5)	(7.0)	(7.6)	(8.3)	(9.0)	(9.8)
Net payment from Medicare	46.0	52.3	55.3	60.2	65.7	71.0	76.4	81.8

¹ Outlier payments due to the indirect medical education adjustment are included in the indirect teaching payments; outlier payments due to the disproportionate share adjustment are included in the disproportionate share payments.

Source: Congressional Budget Office.

TABLE 9.—PERCENT CHANGE IN PPS OPERATING COSTS, PAYMENTS, AND DISCHARGES
FIRST 7 YEARS OF PPS

Year ¹	Operating costs	Payments	Dis-charges	Operating costs per discharge	Payments per discharge	Market basket	Update factor
PPS1	-4.6	11.0	-6.3	1.9	18.5	4.9	4.7
PPS2	4.3	4.2	-5.7	10.6	10.5	3.9	4.5
PPS3	5.7	-0.6	-3.6	9.7	3.1	3.9	.5
PPS4	7.5	3.8	-1.4	9.0	5.3	3.7	1.2
PPS5	9.6	6.6	.7	8.8	5.8	4.7	1.5
PPS6	10.7	7.5	1.2	9.4	6.2	5.4	3.3
PPS7	10.7	7.5	2.4	8.1	5.0	4.5	² 4.7
Cumulative effect:							
PPS1				1.9	18.5	4.9	4.7
PPS2				12.6	30.9	9.0	9.4
PPS3				23.5	35.0	13.2	10.0
PPS4				34.7	42.2	17.4	11.2
PPS5				46.4	50.4	23.0	12.9
PPS6				60.2	59.7	29.6	16.6
PPS7				73.2	67.7	35.4	22.1

¹ Data on costs, payments and cases are for hospital accounting years beginning during each Federal fiscal year. Data on the market basket and update factor are from the corresponding Federal fiscal year (1984 for PPS1, etc.).

² Adjusted for 1.22 percent across-the-board reduction in DRG weights for fiscal year 1990.

Note.—Hospitals in Maryland, Massachusetts, New Jersey, and New York excluded from PPS1 and PPS2. Hospitals in Maryland and New Jersey also excluded from PPS3 through PPS5. Data based on cohorts of hospitals with cost reports available in each 2 successive years.

Source: ProPAC analysis of Medicare cost report data from the Health Care Financing Administration.

CHART 1.—CUMULATIVE INCREASES IN PPS MARKET BASKET, UPDATE, AND PAYMENTS AND COSTS, FIRST NINE YEARS OF PPS

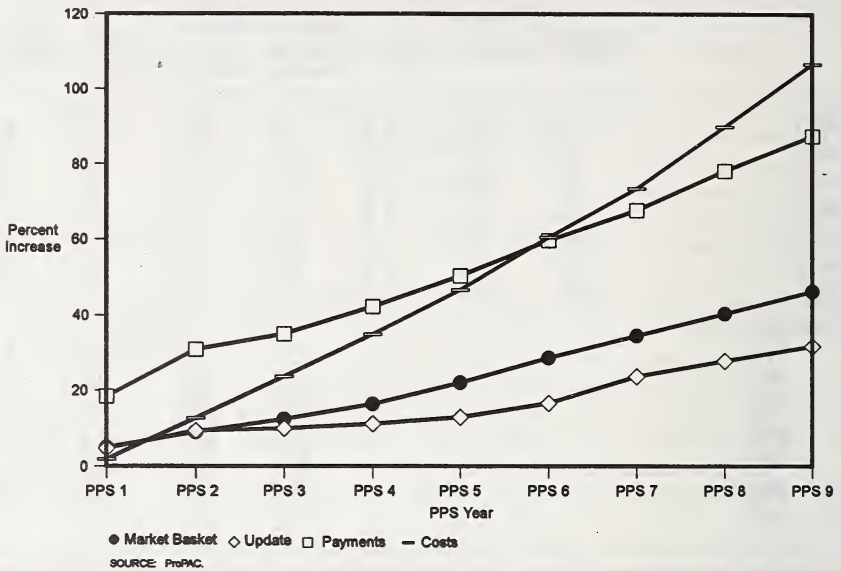


TABLE 10.—PPS OPERATING MARGINS, BY HOSPITAL GROUP, FIRST 7 YEARS OF PPS

[In percent]

Hospital group	PPS 1	PPS 2	PPS 3	PPS 4	PPS 5	PPS 6	PPS 7
All hospitals.....	14.5	14.4	9.8	6.9	4.0	1.0	-1.5
Urban	15.8	15.5	10.9	7.8	4.7	1.5	-1.1
Rural	8.4	8.8	3.3	1.1	.1	-2.0	-3.8
Large urban.....	16.3	15.4	10.9	7.3	4.0	.8	-1.2
Other urban.....	15.0	15.6	11.0	8.6	5.6	2.6	-1.0
Rural referral.....	10.1	13.6	8.7	6.0	4.5	1.8	-2.1
Sole community.....	8.5	6.9	2.3	.8	-1.2	-3.3	-1.8
Other rural	7.5	6.5	.1	-2.3	-2.8	-4.3	-5.7
Major teaching.....	19.4	21.3	16.5	14.1	11.4	8.5	8.1
Other teaching.....	16.5	16.3	11.9	8.6	5.4	2.8	.1
Non-teaching.....	12.3	11.6	6.5	3.5	1.1	-2.1	-5.2

TABLE 10.—PPS OPERATING MARGINS, BY HOSPITAL GROUP, FIRST 7 YEARS OF PPS—
Continued

[In percent]

Hospital group	PPS 1	PPS 2	PPS 3	PPS 4	PPS 5	PPS 6	PPS 7
Disproportionate share:							
Large urban.....	16.8	15.9	12.3	9.7	8.0	5.2	3.9
Other urban.....	15.0	16.3	12.0	10.1	7.7	5.1	2.5
Rural.....	9.6	10.3	3.8	2.0	1.3	.5	-.7
Non-disproportionate share.....	13.8	13.5	8.3	4.7	1.2	-2.0	-5.1
Payment adjustments:							
IME and DSH.....	17.4	17.9	14.2	11.9	10.0	7.5	5.9
IME only.....	17.0	17.3	12.0	8.0	3.3	.4	-2.2
DSH only.....	12.9	12.3	7.4	5.1	3.3	.6	-1.5
No IME or DSH.....	12.0	11.2	6.1	2.7	-.1	-3.5	-7.0
Urban < 100 beds.....	13.2	12.3	6.7	3.9	1.4	-1.3	-3.9
Urban 100-199 beds.....	14.3	12.9	8.2	5.7	3.3	-.5	-3.7
Urban 200-299 beds.....	15.0	14.0	9.4	5.7	2.8	-.5	-3.3
Urban 300-399 beds.....	16.1	15.8	11.4	8.2	5.1	2.3	-.5
Urban 400-499 beds.....	15.6	17.5	13.6	10.0	6.4	3.6	1.3
Urban 500+ beds.....	19.0	18.9	14.0	11.5	7.5	4.2	2.1
Rural < 50 beds.....	6.3	5.7	-.2	-1.0	-1.1	-1.3	-2.3
Rural 50-99 beds.....	8.8	7.2	1.7	-.2	-1.4	-2.7	-3.0
Rural 100-149 beds.....	8.8	8.1	3.0	1.0	.2	-2.4	-3.4
Rural 150-199 beds.....	7.9	9.9	4.5	2.3	2.0	-1.0	-5.2
Rural 200+ beds.....	10.0	13.7	7.4	3.4	1.3	-2.0	-5.4
Voluntary.....	15.0	15.1	10.5	7.5	4.4	1.5	-1.1
Proprietary.....	14.7	13.0	8.1	4.9	2.1	-2.5	-5.1
Urban government.....	15.2	15.1	10.3	7.7	6.0	3.2	.7
Rural government.....	7.2	6.3	.6	-1.8	-1.8	-3.3	-4.5

Notes.—Data for each PPS year (PPS 1, PPS 2, etc.) correspond to each hospital's cost reporting period beginning in that year. For instance, the PPS 1 year includes data from each hospital's cost report beginning during the first year of PPS (Federal fiscal year 1984). Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York, beginning with PPS 3; and includes hospitals in New Jersey, beginning with PPS 6.

IME = Indirect medical education payments.

DSH = Disproportionate share payments.

Source: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

TABLE 11.—DISTRIBUTION OF PPS OPERATING MARGINS, AND PERCENTAGE OF HOSPITALS WITH NEGATIVE MARGINS, FIRST 7 YEARS OF PPS

Percentile	PPS 1	PPS 2	PPS 3	PPS 4	PPS 5	PPS 6	PPS 7
10th	-6.7	-8.4	-14.6	-18.2	-22.4	-25.0	-28.4
25th	3.4	2.2	-3.4	-6.4	-8.8	-11.6	-14.3
Median	11.2	10.7	5.7	3.8	1.9	-.7	-3.0
75th	17.7	17.9	13.4	11.9	10.9	9.1	7.3
90th	23.1	24.0	19.5	18.8	18.5	17.4	16.2
Percentage of hospitals with negative PPS operating margins	16.8	18.7	31.7	39.1	44.9	51.7	57.1

Note.—Data for each PPS year (PPS 1, PPS 2, etc.) correspond to each hospital's cost reporting period beginning in that year. For instance, the PPS 1 year includes data from each hospital's cost report beginning during the first year of PPS (Federal fiscal year 1984). Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York, beginning with PPS 3; and includes hospitals in New Jersey, beginning with PPS 6.

Source: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

TABLE 12.—DISTRIBUTION OF PPS HOSPITALS AND DISCHARGES AND ESTIMATED FISCAL YEAR 1992 PPS PAYMENTS, BY HOSPITAL GROUP

Hospital group	Number of hospitals	PPS hospitals (percent)	PPS discharge (percent)	PPS payments (percent)		
				Total	IME	DSH
All hospitals.....	5,399	100	100	100	100	100
Urban.....	2,881	53	78	85	98	96
Rural.....	2,518	47	22	15	2	4
Large urban.....	1,551	29	43	51	72	60
Other urban.....	1,330	25	35	34	26	35
Rural referral.....	256	5	7	6	2	2
Sole community.....	438	8	2	2	(1)	(1)
Other rural.....	1,824	34	12	8	(1)	2
Major teaching.....	228	4	9	16	60	34
Other teaching.....	995	18	35	38	40	36
Non-teaching.....	4,216	78	56	46	0	29
Disproportionate share:						
Large urban.....	553	10	15	21	43	59
Other urban.....	585	11	18	19	20	37
Rural.....	335	6	4	3	(1)	4
Non-disproportionate share.....	3,926	73	63	57	37	0
Payment adjustments:						
IME and DSH.....	597	11	22	29	63	71
IME only.....	586	11	23	25	37	0
DSH only.....	876	16	15	14	0	29
No IME or DSH.....	3,340	62	41	32	0	0
Urban <100 beds.....	658	12	4	3	(1)	1
Urban 100-199 beds.....	789	15	13	12	4	14
Urban 200-299 beds.....	599	11	18	19	11	19
Urban 300-399 beds.....	376	7	15	16	14	19
Urban 400-499 beds.....	225	4	12	14	20	16

TABLE 12.—DISTRIBUTION OF PPS HOSPITALS AND DISCHARGES AND ESTIMATED FISCAL YEAR 1992 PPS PAYMENTS, BY HOSPITAL GROUP—Continued

Hospital group	Number of hospitals	PPS hospitals (percent)	PPS discharge (percent)	PPS payments (percent)			
				Total	IME	DSH	Outlier
Urban 500 + beds	234	4	15	21	48	28	29
Rural <50 beds	1,130	21	3	2	(1)	(1)	(1)
Rural 50-99 beds	811	15	6	4	(1)	(1)	1
Rural 100-149 beds	308	6	5	3	(1)	1	1
Rural 150-199 beds	134	2	3	2	(1)	1	1
Rural 200 + beds	135	3	5	4	1	2	3
New England	233	4	6	6	10	3	9
Middle Atlantic	559	10	17	20	32	26	34
South Atlantic	765	14	16	15	10	16	15
East North Central	831	15	18	17	21	12	12
East South Central	469	9	8	7	3	8	5
West North Central	753	14	8	7	7	3	5
West South Central	767	14	11	10	5	12	9
Mountain	358	7	4	4	3	2	3
Pacific	664	12	11	13	9	18	9
Voluntary	3,072	57	73	75	79	66	79
Proprietary	795	15	12	11	2	9	10
Urban government	411	8	8	10	18	23	10
Rural government	1,100	20	7	4	(1)	2	1

¹ Less than 0.5 percent

Notes.—PPS payments estimated using PPS rules in effect as of January 1, 1992. Excludes hospitals in Maryland. Columns may not add to 100 due to rounding.

IME = indirect medical education payments.

DSH = Disproportionate share payments.

Source: ProPAC estimates based on ProPAC PPS payment model and fiscal year 1990 MedPAR file data from the Health Care Financing Administration.

TABLE 13.—DISTRIBUTION OF ESTIMATED FISCAL YEAR 1992 PPS PAYMENTS, BY
PAYMENT TYPE AND HOSPITAL GROUP

[In percent]

Hospital group	PPS Payments			
	Basic DRG	IME	DSH	Outlier
All hospitals.....	85.6	5.7	4.0	4.7
Urban.....	83.7	6.5	4.5	5.2
Rural.....	96.2	.7	1.1	2.0
Large urban.....	81.8	8.0	4.8	5.5
Other urban.....	86.7	4.4	4.2	4.7
Rural referral.....	93.7	1.7	1.7	3.0
Sole community.....	98.6	(¹)	.6	.8
Other rural.....	97.7	.1	.8	1.4
Major teaching.....	63.6	21.4	8.7	6.3
Other teaching.....	85.0	6.0	3.9	5.2
Non-teaching.....	93.7	.0	2.6	3.7
Disproportionate share:				
Large urban.....	71.4	11.4	11.1	6.2
Other urban.....	80.9	6.0	8.0	5.1
Rural.....	90.0	.7	6.3	3.0
Non-disproportionate share.....	92.2	3.6	.0	4.2
Payment adjustments:				
IME and DSH.....	72.0	12.3	9.7	6.0
IME only.....	86.6	8.4	.0	5.0
DSH only.....	86.9	.0	8.7	4.3
No IME or DSH.....	96.5	.0	.0	3.5
Urban <100 beds.....	94.9	.8	.9	3.3
Urban 100-199 beds.....	89.9	1.8	4.6	3.7
Urban 200-299 beds.....	87.9	3.4	4.1	4.6
Urban 300-399 beds.....	85.2	5.0	4.6	5.2
Urban 400-499 beds.....	81.3	8.3	4.6	5.8
Urban 500+ beds.....	75.1	13.0	5.3	6.5
Rural <50 beds.....	98.7	(¹)	.5	.8
Rural 50-99 beds.....	98.3	.5	.4	.9
Rural 100-149 beds.....	97.0	.1	1.1	1.8
Rural 150-199 beds.....	95.7	.5	1.4	2.4
Rural 200+ beds.....	92.5	1.8	2.1	3.6
New England.....	81.8	9.4	2.2	6.6
Middle Atlantic.....	77.7	9.2	5.2	7.9
South Atlantic.....	87.3	3.8	4.3	4.5
East North Central.....	87.2	6.7	2.8	3.3
East South Central.....	88.9	2.7	4.6	3.8

TABLE 13.—DISTRIBUTION OF ESTIMATED FISCAL YEAR 1992 PPS PAYMENTS, BY PAYMENT TYPE AND HOSPITAL GROUP—Continued

[In percent]

Hospital group	PPS Payments			
	Basic DRG	IME	DSH	Outlier
West North Central.....	90.1	5.2	1.7	3.0
West South Central.....	88.1	2.9	4.9	4.2
Mountain.....	91.4	3.4	1.7	3.5
Pacific.....	87.2	3.9	5.6	3.4
Voluntary.....	85.6	5.9	3.5	4.9
Proprietary.....	90.9	1.2	3.5	4.3
Urban government.....	74.3	10.9	9.9	4.9
Rural government.....	96.4	.5	1.6	1.4

¹ Less than 0.1 percent.

IME=Indirect medical education payments.

DSH=Disproportionate share payments.

Notes.—PPS payments estimated using PPS rules in effect as of January 1, 1991. Excludes hospitals in Maryland. Columns may not add to 100 due to rounding.

Source: ProPAC estimates based on ProPAC PPS payment model and fiscal year 1989 MedPAR file data from the Health Care Financing Administration.

TABLE 14.—MEDICARE PASS-THROUGH PAYMENTS AS A PERCENTAGE OF TOTAL MEDICARE INPATIENT HOSPITAL PAYMENTS IN THE SIXTH YEAR OF PPS, BY HOSPITAL GROUP

[In percent]

Hospital group	Capital payments	Direct medical education payments	Combined total
All hospitals.....	9.6	2.8	12.4
Urban.....	9.6	3.2	12.8
Rural.....	9.8	.5	10.3
Large urban.....	9.6	4.0	13.6
Other urban.....	9.6	2.3	11.9
Rural referral.....	9.7	1.0	10.7
Sole community.....	10.3	.2	10.5
Other rural.....	9.9	.1	10.0
Major teaching.....	7.6	9.8	17.4
Other teaching.....	9.0	3.7	12.7
Non-teaching.....	10.7	.2	10.9
Disproportionate share:			
Large urban.....	9.2	5.8	15.0
Other urban.....	9.5	2.8	12.2
Rural.....	10.0	.9	10.9

TABLE 14.—MEDICARE PASS-THROUGH PAYMENTS AS A PERCENTAGE OF TOTAL MEDICARE INPATIENT HOSPITAL PAYMENTS IN THE SIXTH YEAR OF PPS, BY HOSPITAL GROUP—
Continued

[In percent]

Hospital group	Capital payments	Direct medical education payments	Combined total
Non-disproportionate share	9.8	1.9	11.7
Payment adjustments:			
IME and DSH.....	8.6	6.1	14.7
IME only.....	8.7	4.3	12.9
DSH only.....	10.9	.2	11.1
No IME or DSH.....	10.6	.2	10.8
Urban < 100 beds.....	10.4	.4	10.8
Urban 100–199 beds.....	11.4	.8	12.3
Urban 200–299 beds.....	10.2	1.9	12.1
Urban 300–399 beds.....	9.4	2.9	12.3
Urban 400–499 beds.....	8.6	3.8	12.4
Urban 500+ beds.....	8.5	6.4	14.9
Rural < 50 beds.....	8.5	.0	8.5
Rural 50–99 beds.....	9.9	.2	10.1
Rural 100–149 beds.....	10.6	.2	10.8
Rural 150–199 beds.....	10.8	.4	11.1
Rural 200+ beds.....	9.4	1.2	10.6
Voluntary.....	9.3	3.2	12.5
Proprietary	12.8	.4	13.2
Urban government.....	8.0	4.2	12.2
Rural government.....	9.0	.4	9.4

Notes.—Total pass-through payments also include organ acquisition payments and other Medicare inpatient hospital payments not paid under PPS. Only capital and direct medical education payments are included in this table. Excludes hospitals in Maryland.

IME = Indirect medical education payments.

DSH = Disproportionate share payments.

Source: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

TABLE 15.—EFFECTS OF PPS UPDATE FACTORS AND OTHER PAYMENT POLICY CHANGES ON PER-CASE PPS PAYMENT RATE, BY HOSPITAL GROUP

Hospital group	Fiscal year—					Total PPS policy effect	Cumulative increase in case-mix index ¹	Total case mix and policy effect
	[In percent]							
	1984-87	1987-89	1990	1991	1992			
All hospitals	5.5	4.5	5.2	4.5	3.1	24.9	26.0	57.4
Urban.....	4.2	3.5	4.4	4.5	2.2	20.3	27.8	53.7
Rural	7.6	8.5	9.2	4.3	7.6	42.9	17.4	67.8
Large urban.....	4.3	3.6	4.3	4.8	2.3	20.8	27.4	53.9
Other urban.....	4.3	3.4	4.6	4.0	2.2	19.8	28.3	53.7
Rural referral.....	3.8	3.2	6.3	4.3	8.6	29.0	23.6	59.4
Sole community.....	9.0	8.3	15.1	6.0	5.1	51.4	13.5	71.8
Small rural Medicare-dependent.....	8.6	10.0	15.4	3.6	6.3	51.7	9.3	65.8
Other rural	8.3	11.8	8.7	4.0	7.6	47.3	14.2	68.1
Major teaching.....	-4.6	3.8	4.8	6.5	3.0	13.9	31.0	49.2
Other teaching.....	4.1	3.6	4.5	3.9	2.3	19.7	28.7	54.0
Non-teaching.....	7.7	5.4	5.6	4.3	3.8	29.7	22.8	59.3
Disproportionate share:								
Large urban.....	5.8	3.6	6.1	6.6	2.1	26.5	29.1	63.3
Other urban.....	5.6	3.1	5.4	4.8	2.8	23.5	28.6	58.8
Rural.....	7.2	7.4	11.5	5.2	10.4	49.0	19.6	78.2
Non-disproportionate share.....	5.2	5.1	4.7	3.6	3.3	23.7	24.7	54.3

Payment adjustments:

IME and DSH	3.3	5.6	5.7	2.5	22.0	30.6	59.4
IME only	1.5	3.6	3.4	2.5	15.6	27.9	47.9
DSH only	9.6	6.3	5.7	3.8	33.3	23.9	65.2
No IME or DSH	7.0	5.4	3.7	3.8	28.3	22.4	57.1
Urban <100 beds	5.2	3.9	3.5	2.3	19.6	19.3	42.7
Urban 100-199 beds	6.7	4.0	5.0	2.0	22.7	23.0	50.8
Urban 200-299 beds	5.7	4.0	4.2	2.2	21.2	26.5	53.3
Urban 300-399 beds	4.5	5.0	4.6	2.0	21.4	27.4	54.6
Urban 400-499 beds	3.4	4.5	4.1	2.4	18.9	30.2	54.8
Urban 506+ beds .....	.0	4.4	4.8	2.6	15.9	31.8	52.8
Rural <50 beds	9.6	12.3	4.3	5.3	49.3	7.2	60.1
Rural 50-99 beds	8.3	10.4	4.3	6.6	46.1	13.7	66.2
Rural 100-149 beds	7.4	8.6	4.1	8.6	43.5	18.9	70.6
Rural 150-199 beds	5.6	7.8	3.7	8.2	36.6	19.8	63.6
Rural 200+ beds	3.7	6.8	4.9	8.9	32.9	23.6	64.3
New England	6.4	4.5	9.6	3.1	33.4	20.6	60.9
Middle Atlantic	-1.0	5.4	5.2	2.7	17.6	25.6	47.7
South Atlantic	4.6	5.3	6.5	3.5	26.2	27.5	60.9
East North Central	3.9	4.2	2.6	3.3	19.6	24.6	49.0
East South Central	4.4	6.5	3.8	3.8	25.2	26.0	57.8
West North Central	10.6	6.0	.8	3.8	28.5	26.6	62.7
West South Central	6.0	6.8	3.4	3.6	26.5	28.5	62.5
Mountain	3.6	5.3	4.6	2.8	23.1	24.1	52.9
Pacific	9.2	4.0	4.4	2.3	27.2	25.6	59.8

TABLE 15.—EFFECTS OF PPS UPDATE FACTORS AND OTHER PAYMENT POLICY CHANGES ON PER-CASE PPS PAYMENT RATE, BY HOSPITAL GROUP—
Continued

[In percent]

Hospital group	Fiscal year—				Total PPS policy effect	Cumulative increase in case-mix index ¹	Total case mix and policy effect
	1984-87	1987-89	1990	1991	1992		
Voluntary.....	4.8	4.5	4.8	4.2	3.0	23.3	55.0
Proprietary.....	5.8	3.3	5.1	4.9	3.0	24.0	64.7
Urban government.....	4.3	3.8	5.5	6.0	1.9	23.2	54.5
Rural government.....	8.2	8.8	10.0	4.3	6.9	44.4	65.3

¹ The effect of the change in case mix for fiscal years 1991 and 1992 by group is estimated from the relative average annual change by group for fiscal years 1985 through 1990. Note.—Figures are not estimates of actual changes in fiscal year PPS hospital payments. They are meant to isolate the effects of changes in PPS rules on PPS payment rates, holding all other factors constant. Payments for each year are estimated based on the PPS rules in effect on the last day of the fiscal year. The effect of change in case mix is reflected only in the last two columns. Excludes hospitals in Maryland; includes hospitals in Massachusetts and New York beginning with fiscal year 1987; and includes hospitals in New Jersey beginning with fiscal year 1989.

IME = Indirect medical education payments.

DSH = Disproportionate share payments.

Source: ProPAC estimates based on ProPAC PPS payment model and fiscal year 1990 MedPAR file from the Health Care Financing Administration.

TABLE 16.—SUMMARY CHARACTERISTICS OF PPS HOSPITALS, BY PAYMENT TYPE

Hospital group	Number of hospitals ¹	1994 estimated Medicare discharges (in thousands)	1989 average number of beds	1993 estimated average case mix ²	1992 average wage index ³	1994 estimated PPS payment (dollars per case) ⁴
All hospitals	5,545	10,684	152	1.4	1.0	\$5,780
Urban	2,950	8,348	224	1.5	1.0	6,280
Rural	2,595	2,336	71	1.2	.9	3,980
Large urban ⁵	1,513	4,353	241	1.5	1.1	6,830
Other urban	1,437	3,994	205	1.5	.9	5,690
Rural referral	235	679	195	1.3	.9	4,640
Sole community ⁶	545	353	52	1.2	.9	4,090
Other rural	1,815	1,303	60	1.2	.8	3,610
Major teaching ⁷	230	984	445	1.6	1.1	9,900
Other teaching	970	3,729	285	1.5	1.0	6,270
Non-teaching	4,345	5,971	107	1.3	1.0	4,790
Disproportionate share:						
Large urban	572	1,626	290	1.5	1.1	8,160
Other urban	587	1,872	255	1.5	.9	6,110
Rural	357	406	95	1.2	.8	4,180
Non-disproportionate share	4,029	6,780	123	1.4	1.0	5,210
Urban <50 beds	282	101	35	1.1	1.0	4,230
Urban 51-100 beds	453	406	77	1.2	1.0	4,650
Urban 101-200 beds	868	1,594	146	1.3	1.0	5,380
Urban 201-400 beds	967	3,714	284	1.5	1.0	6,040
Urban 401+ beds	380	2,534	563	1.6	1.0	7,550
Rural <50 beds	1,345	461	33	1.1	.8	3,350
Rural 51-100 beds	770	718	74	1.1	.8	3,680
Rural 101-200 beds	362	715	138	1.3	.9	4,160
Rural 201+ beds	118	442	277	1.4	.9	4,850

TABLE 16.—SUMMARY CHARACTERISTICS OF PPS HOSPITALS, BY PAYMENT TYPE—Continued

Hospital group	Number of hospitals ¹	1994 estimated Medicare discharges (in thousands)	1989 average number of beds	1993 estimated average case mix ²	1992 average wage index ³	1994 estimated PPS payment (dollars per case) ⁴
New England.....	239	585	177	1.4	1.1	6,590
Middle Atlantic.....	621	1,917	240	1.4	1.1	6,550
South Atlantic.....	772	1,721	175	1.4	.9	5,420
East North Central.....	832	1,884	181	1.4	1.0	5,670
East South Central.....	474	881	138	1.4	.8	4,670
West North Central.....	766	883	92	1.4	.9	5,160
West South Central.....	778	1,166	126	1.4	.9	5,100
Mountain.....	384	472	95	1.4	1.0	5,580
Pacific.....	679	1,176	141	1.5	1.2	6,880
Voluntary.....	3,155	7,839	184	1.4	1.0	5,940
Proprietary.....	815	1,244	133	1.4	1.0	5,290
Urban government.....	435	861	211	1.5	1.0	6,850
Rural government.....	1,140	741	56	1.2	.8	3,710

¹ Number of hospitals for which data were available for PPS payment simulations.² Weighted by case-mix-adjusted PPS payments. The unweighted average for all hospitals is 1.2.³ Weighted by wage-index-adjusted PPS payments. The unweighted average for all hospitals is 0.9.⁴ Incurred payments (including copayments) divided by the number of Medicare discharges.⁵ Hospitals located in Metropolitan Statistical Areas with more than 1 million people.⁶ Sole community hospitals that are also rural referral centers are including in the rural referral category.⁷ Teaching hospitals for which the ratio of the number of full-time-equivalent interns and residents to the number of beds is .25 or larger.

Source: Congressional Budget Office estimates based on data from the Health Care Financing Administration and ProPAC.

TABLE 17.—HISTORICAL TRENDS IN FACTORS AFFECTING PPS RATES AND AVERAGE PAYMENTS PER CASE
[Percentage change from previous year]

	Fiscal year—												
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Market basket index ¹	8.1	5.5	4.9	4.1	2.9	3.2	4.7	5.4	5.5	5.2	4.4	4.1 ³	5.2
Annual update factor ²						1.15	1.76	3.33	5.71	2.83	2.99	2.73 ³	5.36
Case mix index			8.4	3.1	2.5	2.1	3.2	2.5	.86	2.5	1.4	2.0	2.0
Average payments per discharge ⁴	13.8	10.2	10.8	15.0	8.0	-3.6	2.6	9.1	8.9	6.4	6.5	5.2	7.5
Average payments per beneficiary ⁴	15.2	11.4	7.8	6.6	1.5	-0.3	1.8	6.5	9.3	5.7	9.3	5.5	8.5
GNP deflator ⁵													

¹ Historical data through fiscal year 1992, fiscal year 1993 President's Budget estimates in fiscal year 1993.

² Figures represent average update factors for the year.

³ Average update estimated at market basket minus 1.38 percent.

⁴ Estimates for fiscal years 1989 and 1990 include the effect of provisions of the Medicare Catastrophic Coverage Act of 1988.

⁵ Not available from this office.

Source: HCFA Office of the Actuary.

TABLE 18.—COMPARISON OF INCREASES IN HOSPITAL MARKET BASKET, PPS UPDATES, AND PPS PAYMENTS PER CASE, FISCAL YEARS 1984–1993

[In percent]

Fiscal year	Increase in hospital market basket ¹	Actual update	Increase in PPS payments per case ²
1984	4.9	4.7	18.5
1985	4.0	4.5	10.3
1986	4.3	5	3.1
1987	3.7	1.2	5.3
1988	4.7	1.5	5.8
Large urban		1.5	
Other urban		1.0	
Rural		3.0	
1989	5.4	3.3	6.2
Large urban		3.4	
Other urban		2.9	
Rural		3.9	
1990	5.5	⁴ 4.7	5.0
Large urban ³		⁴ 4.4	
Other urban ⁵		⁴ 3.7	
Rural		⁴ 8.4	
1991	5.2	3.4	6.2
Large urban		3.2	
Other urban		3.2	
Rural		4.5	
1992	4.4	3.0	5.2
Large urban		2.8	
Other urban		2.8	
Rural		3.8	
1993	4.1	2.7	4.8
Large urban		2.6	
Other urban		2.6	
Rural		3.6	

¹ Based on data available when final PPS rule was issued.² Increases for 1984 through 1989 based on data from Medicare Cost Reports, which correspond to hospital cost reporting periods, rather than Federal fiscal years. Increases for 1990 through 1992 based on PPS update and estimated case-mix index increase.³ Large urban = metropolitan areas with populations of one million or more.⁴ Actual updates for fiscal year 1990 adjusted to reflect 1.22 percent across-the-board reduction in DRG weights.⁵ Other urban = metropolitan areas with populations of less than one million.

Source: ProPAC.

HIGHLIGHTS OF LEGISLATION AND REGULATIONS AFFECTING THE PROSPECTIVE PAYMENT SYSTEM

Medicare's Prospective Payment System (PPS) for hospitals has evolved through legislation and regulation. The original authorizing legislation, the Social Security Amendments of 1983 (P.L. 98-21), was first implemented by interim final rules issued by the De-

partment of Health and Human Services on September 1, 1983 (48 FR 39752), and final rules issued on January 3, 1984 (49 FR 234).

The Deficit Reduction Act of 1984 (P.L. 98-369) made certain changes to PPS. These changes were incorporated into final rules issued by the Department on August 31, 1984 (49 FR 34728).

The Department issued final rules on September 3, 1985 (50 FR 35645) making certain changes to PPS and freezing the PPS payment rates for fiscal year 1986. However, none of the payment features of these final rules became effective.

The payment features the Department would have applied to fiscal year 1986 could not be implemented because the Emergency Extension Act of 1985 (P.L. 99-107, as amended by P.L. 99-201) extended the payment provisions that were in effect on September 30, 1985 (the final day of fiscal year 1985), through March 14, 1986. The fiscal year 1985 payment provisions were extended again, through April 30, 1986, by Public Law 99-272. The extension of the fiscal year 1985 payment provisions into fiscal year 1986 had many effects, including a delay in the PPS transition schedule.

The Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177, known as the Gramm-Rudman-Hollings Act) reduced Medicare payments to hospitals in fiscal year 1986.

Two reconciliation bills in the 99th Congress changed a number of PPS provisions. The Consolidated Omnibus Budget Reconciliation Act of 1985 (P.L. 99-272, known as COBRA) was implemented by an interim final rule on May 6, 1986 (51 FR 16771), and a final rule on September 3, 1986 (51 FR 31453). The Omnibus Budget Reconciliation Act of 1986 (P.L. 99-509) was accompanied by a final rule on November 24, 1986 (51 FR 42229).

Several features of the PPS, including the calculation of the wage index, the inclusion of hospitals in Puerto Rico and alcohol and drug abuse hospitals and distinct part units in the PPS, were altered by a final regulation published on September 1, 1987 (52 FR 33034). Changes in hospital payments required by Public Law 100-119 were implemented by a final regulation published on October 23, 1987 (52 FR 39637). A notice implementing the provisions of Public Law 100-203 (OBRA 1987) was issued April 5, 1988 (53 FR 11134). Regulations issued September 30, 1988 (53 FR 38476), established payment rates for fiscal year 1989 and made various changes in PPS rules, especially the treatment of outlier cases.

Public laws 100-360, 100-485, and 100-647 made minor and technical changes to PPS provisions, especially those contained in OBRA 1987. Public Law 101-239, along with regulations issued September 1, 1989 (54 FR 36452) and December 29, 1989 (54 FR 53753), made additional changes to PPS rules. The Continuing Resolution of October 1, 1990, Public Law 101-403, extended the regional floor and provided for PPS payments through October 20, 1990. Public Law 101-508, OBRA 1990, provides a 5-year deficit reduction plan which would reduce total Medicare outlays by \$43.1 billion between fiscal year 1991 and 1995. These provisions, along with regulations issued September 4, 1990 (55 FR 35990), January 7, 1991 (56 FR 562), and August 30, 1991 (56 FR 43196) made further changes in PPS rules.

Legislation and regulations which changed selected features of the prospective payment system are highlighted as follows:

Increases in Medicare payments to hospitals

Public Law 98-21 and 49 FR 234: Provides that the Medicare DRG payment rates for fiscal years 1984 and 1985 would be increased annually by the increase in the hospital market basket plus 1 percentage point, subject to a budget neutrality requirement which provides that Medicare payments in those 2 years must equal what would have been spent if PPS had not been put in place. Provides that the Secretary would determine the rate of increase for fiscal year 1986 and thereafter, taking into account the recommendations of the Prospective Payment Assessment Commission.

Public Law 98-369 and 49 FR 34728: Changes the annual increase in the DRG payment rates for fiscal year 1985 to the increase in the market basket plus 0.25 percentage point, subject to budget neutrality. Limited the rate of increase to be determined by the Secretary for fiscal year 1986 to the rate of increase in the market basket plus 0.25 percentage point.

50 FR 35645: The Secretary promulgated a zero rate of increase in the DRG payment rates for fiscal year 1986.

Public Law 99-107: Provided that the payment rates in effect on September 30, 1985, would remain in effect until November 14, 1985. Public Laws 99-155, 99-181, 99-189 and 99-201 extended this requirement through March 14, 1986. (The freeze was extended through April 30, 1986, by P.L. 99-272.)

Public Law 99-177: Reduced fiscal year 1986 Medicare payments to hospitals by 1 percent beginning March 1, 1986.

Public Law 99-272, 51 FR 16771, and 51 FR 31453: Provided that the fiscal year 1986 PPS payment rates would be frozen at fiscal year 1985 levels until May 1, 1986, and would be increased $\frac{1}{2}$ percent for the remainder of the year.

Public Law 99-509 and 51 FR 42229: Increased the payment rates for PPS hospitals by 1.15 percent in fiscal year 1987 and by the hospital market basket minus 2 percentage points in fiscal year 1988.

Public Law 100-119, 52 FR 39637: Provided an update of zero percent for the period from October 1, 1987, to November 20, 1987. The final sequester order pursuant to this legislation reduced all Medicare payments to hospitals by 2.324 percent beginning on November 21, 1987. The update of 2.7 percent mandated by Public Law 99-509 (52 FR 33034) also went into effect on November 21, 1987.

Public Law 100-203, 53 FR 11134, 53 FR 38476: required that the sequestration reduction mandated by Public Law 100-119 continue through March 31, 1988. Beginning on April 1, 1988, instead of the 2.7 percent update provided by Public Law 99-509, the PPS payment rates are increased by 3 percent for hospitals located in a rural area, by 1.5 percent for hospitals located in an urban area with a total population of more than 1 million persons (large urban areas), and by 1 percent for hospitals located in other urban areas. For fiscal year 1989, the update is equal to the increase in the market basket index minus 1.5 percentage points for hospitals located in a rural area, minus 2 percentage points for hospitals located in a large urban area, and minus 2.5 percentage points for hos-

pitals located in other urban areas. The market basket increase for 1989 was forecast at 5.4 percent, resulting in the following rate increases: rural, 3.9 percent; large urban, 3.4 percent; other urban 2.9 percent.

Public Law 101-239 and 54 FR 53753: Sets the following update factors for fiscal year 1990 for discharges occurring on or after January 1, 1990: for hospitals located in large urban areas, the market basket minus 0.12 percentage points; for hospitals in other urban areas, the market basket minus 0.53 percentage points; and for hospitals in rural areas, the market basket plus 4.22 percentage points. In addition, OBRA 1989 included a DRG weighting factor reduction of 1.22 percent for discharges in fiscal year 1990, that effectively reduces PPS payments by 1.22 percent. The net effect of this reduction produces the following actual fiscal year 1990 update factors for hospitals in large urban, other urban, and rural areas: market basket minus 1.1 percentage points; market basket minus 1.75 percentage points; and the market basket plus 3.0 percentage points, respectively. For fiscal year 1990, the market basket increase is estimated to be 5.5 percent, providing the following final update factors for fiscal year 1990: 4.4 percent for large urban hospitals, 3.75 percent for other urban hospitals, and 8.5 percent for rural hospitals.

Public Law 101-403: Extended the regional floor through October 20, 1990, on a budget neutral basis.

Public Law 101-508 and 56 FR 562: Provides for a freeze in hospital payments at fiscal year 1990 levels for the period from October 21, 1990 through December 31, 1990, deeming the market basket increase applicable to PPS payments to be equal to zero for this period. Includes a phase-out of the payment differential between other urban and rural hospitals, through the use of separate update factors for other urban and rural hospitals designed to eliminate the differences between other urban and rural standardized amounts by fiscal year 1995. Set separate update factors for hospitals located in large and other urban areas, and for hospitals located in rural areas. For large and other urban hospitals, the following update factors are: for fiscal year 1991, for discharges occurring on or after January 1, 1991, the market basket increase (MBI) minus 2.0 percentage points; for fiscal year 1992, the MBI minus 1.6 percentage points; for fiscal year 1993, the MBI minus 1.55 percentage points; and for fiscal years 1994-95, the full MBI. The update factors for rural hospitals are: for fiscal year 1991, for discharges occurring on or after January 1, 1991, the MBI minus 0.7 percentage points; for fiscal year 1992, the MBI minus 0.6 percentage points; for fiscal year 1993, the MBI minus 0.55 percentage points; for fiscal year 1994, the MBI plus 1.5 percentage points; and, for fiscal year 1995, the amount necessary to provide rural hospitals with an average standardized amount equal to that of other urban hospitals.

Wage index

Public Law 98-21: Provided that the Federal portion of the DRG rates be adjusted by a wage index to reflect the hospital wage level in an individual hospital's geographic area relative to the national average hospital wage level.

49 FR 234: The Department indicated it would use employment data from the Bureau of Labor Statistics (BLS) to develop the wage index. While acknowledging the limitations of the BLS data (including lack of information about part time employment), the Department stated that BLS data are the best presently available for the development of the wage index.

Public Law 98-369: Required the Secretary, in consultation with the Secretary of Labor, to conduct a study to develop an appropriate wage index, taking into account wage differences of full-time and part-time employees. The results of the study were to be reported to Congress by August 18, 1984. If any changes are made to the wage index as a result of this study, the Secretary is required to make retroactive adjustments to the payment amounts for hospital cost reporting periods beginning on or after October 1, 1983. Required the Secretary to study and report to Congress proposed criteria to be used to modify a hospital's wage adjustment if the hospital can demonstrate that the wage index does not accurately reflect wage levels in the labor market serving the hospital.

49 FR 34728: The Department indicated that it surveyed the hospitals subject to PPS to obtain wage and employment data which could be used to develop an improved wage index. However, the data obtained had too many errors to develop a reliable wage index in time for the publication of the August 1984 rules. The Department is planning to use these data, once they are determined to be accurate and reasonably complete, to conduct the mandated study and to construct a revised wage index. The Department indicated that any revised wage index will be retroactive to October 1, 1983, as mandated by law. The Department indicated that it does not intend to address the development of adjustment criteria in the near future.

50 FR 35645: The Department promulgated final regulations to implement the survey-based gross wage index retroactive to October 1, 1983. The survey-based wage index used to determine the amount of a hospital's underpayment or overpayment would be based on the recognized urban/rural definition in effect for the entire Federal fiscal year for which the payment adjustment determination is being made. The payment adjustments will be spread out over the course of one year, rather than requiring lump-sum payments to minimize the negative impact on overpaid hospitals.

Public Law 99-107: Provided that Medicare hospital payment amounts would be determined on the same basis as they were on September 30, 1985. Public Laws 99-155, 99-181, 99-189 and 99-201 extended this requirement through March 14, 1986. This means that there can be no change in the wage index until after this date. (This was extended through April 30, 1986, by P.L. 99-272.)

Public Law 99-272: Mandated that the gross wage index be used beginning on May 1, 1986. Also eliminated the requirement for retroactive adjustment of hospital payments.

52 FR 33039: Changed the method of calculating the national average wage level, and updated the wage index data. The national average wage level is now calculated by dividing national aggregate wages and salaries by the national aggregate number of paid hours of hospital employment. The Secretary also used new data; wages and salaries and paid hours of employment for hospital cost

reporting periods beginning during fiscal year 1984 (the first year of the PPS). However, in order to avoid large changes in index values for individual areas, the Secretary adopted a blended wage index, which is calculated by adding together the 1982 and the 1984 index values for each area and dividing the resulting sum by 2. Wage index values for urban and rural labor market areas located in Puerto Rico are based solely on 1984 data. The new index took effect for discharges occurring on or after October 1, 1987.

Public Law 100-203: Requires the Secretary to update the wage index by October 1, 1990, and at least every 3 years thereafter. Updates are to be based on a periodic survey of the wages and wage related costs of PPS hospitals. To the extent feasible, the survey must be designed to measure earnings and hours of paid employment by occupational category, and to permit exclusion of the wages and wage related costs hospitals incur in providing skilled nursing facility services.

53 FR 38476: Continued use of the wage index based on a blend of 1982 and 1984 data. The new index also took account of certain legislative changes, such as the redesignation of certain rural counties as urban.

Public Law 100-647: Required adjustments in the wage index to ensure that, for discharges during fiscal years 1990 and 1991, no other area suffers a reduced wage index because of the shifting of one of these counties. The Secretary is required to report to Congress by January 1989 on possible ways of reducing the adverse impact on wage index values during fiscal year 1989.

54 FR 36452: Changed the method of calculating the wage index from the blended wage index based on 1982 and 1984 wage data to an index based solely on 1984 wage data for discharges occurring in fiscal year 1990.

Public Law 101-239: Requires the Secretary to update the area wage index annually in a budget neutral manner, beginning in fiscal year 1993.

55 FR 35990: Changed the method of calculating the wage index to one basing the index on 1988 wage survey data, but included temporary protections for hospitals most severely affected by a shift from the 1984 to the 1988 survey data.

Public Law 101-403: Extended the use of the wage index in effect on September 30, 1990 for discharges occurring on or after October 1, 1990 through October 20, 1990.

Public Law 101-508 and 56 FR 562: Extends the use of the wage index in effect on September 30, 1990 for discharges occurring on or after October 21, 1990 through December 31, 1990. Requires the use of a wage index based solely on the 1988 wage survey, for discharges occurring on or after January 1, 1991 and before October 1, 1993. Requires ProPAC to study the available data on wages by occupational category and include its recommendations on modifying the wage index to account for occupational mix in the March 1991 report to Congress.

Referral centers

Public Law 98-21: Required the Secretary to provide for such exceptions and adjustments to the DRG payment amounts as the Secretary deems appropriate to take into account the special needs of

regional and national referral centers (including hospitals of 500 or more beds located in rural areas).

49 FR 234: The Department's criteria for a referral center were that the hospital must be located in a rural area and have at least 500 beds; or the hospital must have an inpatient population such that at least 50 percent of its Medicare patients are referred from other hospitals or from physicians not on the staff of the hospital, at least 60 percent of the hospital's Medicare patients reside more than 25 miles from the hospital, and at least 60 percent of all services received by Medicare beneficiaries are provided to beneficiaries residing more than 25 miles from the hospital. Such hospitals would be paid on the basis of the higher urban rates, rather than the rural rates. No adjustment was provided for rural referral centers with fewer than 500 beds or for referral centers located in urban areas.

Public Law 98-369: Provided that a rural hospital may appeal to the Secretary to be classified as a rural referral center on the basis of criteria established by the Secretary which would allow the hospital to demonstrate that it should be so classified because it has characteristics (such as wages, scope of services, service area, and mix of medical specialties) similar to those of a typical urban hospital located in the same census region.

49 FR 34728: The Department broadened the definition of a rural referral center to include rural hospitals that meet a case mix index threshold, a minimum number of discharges, and one of the following three criteria: more than 50 percent of the hospital's medical staff are specialists, at least 60 percent of discharges are inpatients residing more than 25 miles from the hospital, or at least 40 percent of inpatients have been referred either from other hospitals or from physicians not on the hospital's staff.

50 FR 35645: The Department changed the qualifying criteria for referral centers by (1) specifying the methodology for and updating the case mix index thresholds (i.e., either the national case mix index value of 1.1294 or the median urban case mix index value for the hospital's region), and (2) specifying the threshold for the required number of discharges (i.e., either the national discharge criterion of 6,000 or the median number of urban discharges for the hospital's region).

Public Law 99-272: Reduced the requirement that a hospital have at least 6,000 or more discharges a year to 3,000, but only for osteopathic hospitals.

51 FR 31453: Reduced the requirement for all other hospitals to 5,369 (or a number at least equal to a specific number of discharges calculated for each census region).

Public Law 99-509: Reduced that requirement further to 5,000. Public Law 99-509 also specified that teaching hospitals should not be considered when calculating the median case mix for urban hospitals located in the same region.

52 FR 33034: Updated the national and regional case mix and discharge standards.

Public Law 100-203 and 53 FR 11134: Reduced the minimum number of beds criterion for hospitals located in a rural area, from 500 to 275, effective for discharges occurring on or after April 1, 1988. The legislation also requires the Secretary to study and

report to Congress, by May 1, 1989, on (1) the referral center criteria, including, for hospitals currently designated as referral centers, the relationship of their PPS payments to their costs of inpatient care, and the appropriateness of payment on the basis of some rate other than the "other urban area" rate, and; (2) recommendations regarding criteria to be used in designating referral centers for cost reporting periods beginning on or after October 1, 1989.

Public Law 101-239 and 54 FR 53753: Extends the classification of hospitals as rural referral centers for cost reporting periods beginning on or after October 1, 1989 and before October 1, 1992. The extension applies to hospitals classified as rural referral centers on or before September 30, 1989.

Outliers

Public Law 98-21: Required the Secretary to provide for additional payments to hospitals for atypical cases, "outliers" whose length of stay exceeds the mean by a fixed number of days or a fixed number of standard deviations, whichever is fewer; or cases which do not meet the length of stay criteria but have charges adjusted to cost that exceed a fixed multiple of the DRG rate, or some other fixed dollar amount, whichever is greater. Provides that total outlier payments in a fiscal year must be between 5 and 6 percent of total projected DRG payments for that year.

49 FR 234: For fiscal year 1984, the Department defined a "day" outlier case as one for which the length of stay exceeds the average length of stay for that DRG by the lesser of 20 days or 1.94 standard deviations. The additional payment for each outlier day beyond the threshold would be 60 percent of the hospital's Federal payment amount for the DRG divided by the average length of stay for the DRG. A "cost" outlier case was defined as one for which covered charges, adjusted to operating costs, exceed the greater of 1.5 times the hospital's Federal payment amount for the DRG or \$12,000. For cost outliers, the additional payment is 60 percent of the difference between the hospital's adjusted charges for the discharge and the threshold. The Department expected that under these criteria, outlier payments would approximate 6 percent of total payments to hospitals. No provision was made for outlier payments to transferring hospitals.

49 FR 3472: Updated the outlier thresholds and permitted a hospital that transfers a high cost patient on or after October 1, 1984, to receive cost outlier payment.

50 FR 35645: Updated the outlier thresholds.

Public Law 99-509 and 51 FR 42229: Established a separate urban and a separate rural set-aside factor for outliers. As a result, instead of the uniform 5 percent reduction factor applied to all of the standardized amounts, there are now two factors, one for urban standardized amounts and one for rural standardized amounts. Overall, outlier payments are required to be made at the same level as they were before this provision was enacted.

Public Law 100-203: Increased payments for outlier cases classified in DRGs relating to patients with burns from April 1, 1988, through September 30, 1989. This legislation also prohibited the Secretary from issuing any final regulations before September 1,

1988, which change the method of payment for outlier cases (other than burn cases).

53 FR 38476: Modified the thresholds used in determining whether a case is an outlier and increased the allowable payment amounts for cost outliers, effective November 1, 1988 (transitional rules were established for discharges during October 1988). The new threshold for length of stay outliers was the lesser of 24 days or 3 standard deviations; for cost outliers it was the greater of \$28,000 or 2 times the DRG rate. The marginal cost factor for cost outliers (other than burn cases) was raised to 75 percent.

54 FR 36452: Modified the thresholds for determining whether a case is an outlier and increased the allowable payment amounts for cost outliers for fiscal year 1990. The new threshold for length of stay outliers is the lesser of 28 days or 3 standard deviations; for cost outliers it is the greater of \$34,000 or 2 times the PPS payment.

55 FR 35990: Modified the thresholds for determining whether a case is an outlier and increased the allowable payment amounts for cost outliers for fiscal year 1991. The new threshold for length of stay outliers is the lesser of 29 days or 3 standard deviations; for cost outliers, the greater of \$35,000 or 2 times the PPS payment.

56 FR 43196: Established combined outlier payment system for operating and capital costs. Modified the threshold for length of stay outliers to 32 days or 3 standard deviations; for cost outliers, the greater of \$44,000 or 2 times the PPS payment.

57 FR 39746: Modified the threshold for length of stay outliers to the lesser of 23 days or 3 standard deviations; for cost outliers, the greater of \$35,500 or 2 times the DRG rate.

Payment for indirect medical education

Public Law 98-21: Provided for additional payments to hospitals for the indirect costs of medical education, computed at twice the level of the educational adjustment factor provided under regulations in effect as of January 1, 1983—under the former “section 223” cost limits. The Federal portion of a hospital’s DRG payments is then increased by this doubled factor.

49 FR 234: The educational adjustment factor in effect as of January 1, 1983 was 6.06 percent for each 0.1 increase, (above zero), in the ratio of a hospital’s full-time equivalent interns and residents to its number of beds. Full-time equivalent interns and residents were defined as the sum of those employed for 35 hours or more per week, plus one-half of the total number of interns and residents working less than 35 hours per week. A hospital was allowed to count only interns and residents who were employed by and furnishing services at that hospital (excluding those employed by the hospital but furnishing services at another site).

Under PPS, the Department provided for an education adjustment factor of 11.59 percent (rather than twice the 6.06 percent factor provided in the earlier regulations). The regulations indicated that 11.59 percent was the appropriate increase after recomputing the factor using the data base on which the DRG payments were based, instead of the data base used to calculate the earlier factor. Criteria for determining which interns and residents could be counted were kept the same as in earlier regulations, except in-

terns and residents furnishing services in the hospital but employed by an organization with a long-standing historical medical relationship with the hospital could be included.

Public Law 98-369: Provided that, effective October 1, 1984, all interns and residents who furnish services to a hospital are to be counted for purposes of determining that hospital's indirect medical education adjustment, regardless of whether or not the interns and residents are employees of that hospital.

49 FR 34728: To conform with the change in law, the Department indicated that it would now count full-time interns and residents on the basis of where their services were provided. When working at more than one hospital, each intern's or resident's time would be apportioned to each facility. To avoid the potential for counting interns and residents more than once, the Department is requiring hospitals to submit quarterly reports documenting the time worked by interns and residents. The final lump-sum payment for indirect medical education costs will not be made until the audit of a hospital's cost report is completed.

50 FR 35645: The Department changed the method used to determine the number of beds in a hospital for purposes of counting interns and residents for cost reporting periods beginning on or after October 1, 1984. In addition, the requirement that a hospital provide a quarterly report on the number of interns and residents was replaced with an annual report that counts the number of interns and residents on September 1 (with an additional count on April 15, 1985 for hospitals with cost reporting periods beginning on or after October 1, 1984 and before July 1, 1985). The requirement of counting hours of interns and residents to determine full-time equivalents was deleted. Instead, all interns and residents assigned to the hospital on September 1 (or April 15, 1985 if applicable) will be counted as full-time except for those individuals splitting their time between prospective payment areas and one or more areas excluded from PPS, or spending all their time in excluded areas. The intermediary will be required to review the hospital's documentation to verify the hospital's intern- and resident-to-bed ratio.

Public Law 99-272, 51 FR 16771, and 51 FR 31453: Based the additional payment to a hospital on a formula that provides an increase of approximately 8.1 percent in the Federal portion of the DRG payment, from May 1, 1986, to October 1, 1988 (when the disproportionate share adjustment was scheduled to expire). The payment increases with the ratio of a hospital's interns and residents to its bed size on a curvilinear or variable basis (i.e., the increase in the payment is less than proportional to the increase in the ratio of interns and residents to bed size). The payment adjustment after October 1, 1989, would be an increase of approximately 8.7 percent.

Public Law 99-509: Extended the disproportionate share adjustment, and the reduction in the teaching adjustment to 8.1 percent, until October 1, 1989.

Public Law 100-203 and 53 FR 38476: Extended the disproportionate share adjustment to October 1, 1990, and reduced the teaching adjustment factor from approximately 8.1 percent to approximately 7.7 percent, effective for discharges occurring on or after October 1, 1988, but before October 1, 1990. The adjustment for discharges occurring on or after October 1, 1990 (when the disproport-

tionate share adjustment was originally scheduled to expire), is also reduced from 8.7 percent to 8.3 percent.

Public Law 100-647: Extended the teaching adjustment of 7.7 percent through September 30, 1995.

Public Law 101-508: Makes the indirect medical education adjustment of 7.7 percent permanent.

Disproportionate share hospitals

Public Law 98-21: Required the Secretary to make adjustments to PPS rates, as deemed appropriate, to account for hospitals that serve a disproportionate share of low-income patients.

Public Law 99-272: Specified the amount of additional payments to hospitals serving a disproportionate share of low-income patients, and the criteria to qualify for the payments, varying with the location and size of the hospital, and percentage of low-income patients seen at the hospital (the disproportionate patient percentage). Defined the disproportionate patient percentage as the hospital's total number of days attributable to Medicare beneficiaries who also receive Federal Supplemental Security Income payments divided by the total number of Medicare patient days, plus the number of Medicaid patient days divided by the total patient days. Also established payments to urban hospitals with 100 or more beds and 30 percent of their net revenues derived from State and local government payments for indigent care. The new disproportionate share rules applied only for discharges between May 1, 1986, and September 30, 1989.

Public Law 100-203: Extended the additional payment for disproportionate share hospitals until September 30, 1990. Increased the adjustment for urban hospitals with 100 or more beds receiving more than 30 percent of their net inpatient revenues from State and local government funds for indigent care.

Public Law 100-647: Extended the authority for the disproportionate share adjustment until September 30, 1995.

Public Law 101-239 and 54 FR 53753: Increased the disproportionate share adjustment for urban hospitals with 100 or more beds and rural hospitals with 500 or more beds, for rural referral centers, and for sole community hospitals. Reduced the disproportionate patient percentage required for a sole community hospital or rural hospital with 100 or more beds to qualify for the adjustment. (See table 4 for details of criteria and adjustment formulas.)

Public Law 101-508: Increased the disproportionate share adjustment for urban hospitals with 100 or more beds and rural hospitals with 500 or more beds, and for hospitals qualifying for the adjustment based on revenue for indigent care received from State and local governments. Also made the DSH adjustment permanent.

Urban/rural boundaries

Public Law 98-21 and 49 FR 234: Provided that hospitals in urban areas are paid different Federal DRG rates than hospitals located in rural areas. Urban areas are defined as those located within a Metropolitan Statistical Area (MSA) or a New England County Metropolitan Area (NECMA). Rural areas are those not classified as urban areas. Provided that during a 3-year transition period, hospitals are paid on the basis of Federal DRG payment

amounts calculated separately for each of the nine census regions of the country.

Public Law 98-369: Provided that hospitals located in an MSA that crosses census region boundaries be deemed to be in the region in which a majority of the hospitals in that MSA are located or, at the option of the Secretary, the region from which the majority of the Medicare inpatient discharges within that MSA are made. In addition, provided that hospitals located in counties redesignated from urban to rural because of a change in the MSA or NECMA classification system since April 20, 1983, are allowed a 2-year transition to the lower rural payment rates. In the first hospital cost reporting period, the hospital would be paid the rural rate plus two-thirds of the difference between its rural and urban rates. In the second year, it would be paid the rural rate plus one-third of the difference between its rural and urban rates.

Public Law 100-203: Changed the standards for including a rural county adjacent to an urban area in the definition of the urban area. If (1) at least 15 percent of employed residents of the rural county commute to one or more adjacent urban areas for employment, or (2) the sum of the number of county residents commuting to all adjacent urban areas plus the number of residents of all adjacent urban areas commuting to the rural county for employment, is at least equal to 20 percent of the employed population of the county, then the rural county would be included in the definition of the urban area to which the greatest number of its residents commute.

Public Law 100-647: Requires adjustments to ensure that, for discharges during fiscal years 1990 and 1991, no other area suffers a reduced wage index because of the shifting of one of these counties.

Public Law 101-239: Requires the Secretary to establish a Geographic Classification Review Board to consider the direct appeals of hospitals for a change in classification from rural to urban, or from one urban area to another urban area. Modifies the rules for adjusting values as a result of reclassification of a county under either the OBRA 87 provision or the new appeal procedure.

Public Law 101-508: Provides that if including wages of all redesignated hospitals in the wage index of the MSA to which they are redesignated reduces the MSA's wage index by more than 1 percentage point, then the original wage index (calculated without the wages of the redesignated hospitals) is applied to hospitals in the MSA. Redesignated hospitals would receive a wage index combining their wages plus the wages of the MSA to which they were redesignated. Extends the due date for initial applications for reclassification submitted to the Geographic Classification Review Board until November 6, 1990, and clarifies the Secretary's ability to review decisions of the Board.

Payments for capital-related costs

Public Law 98-21: Provided that capital-related costs (including depreciation, leases and rentals, interest, and a return on equity for proprietary hospitals) are excluded from the prospective payment system until no earlier than October 1, 1987, and are paid for on a reasonable cost basis. This legislation also required the Secretary to report to Congress within 18 months of enactment (October

1984) on methods and proposals by which capital costs can be included in the prospective payment rates. In March 1986, HHS submitted a report to Congress on incorporating capital costs in the prospective payment rates.

Public Law 98-369: Provided that, in the case where funds are borrowed for the purchase of used assets (change of ownership), the interest expense allowable to the new owner may not exceed the amount that would be incurred by borrowing funds equal to the depreciated value of the assets on the seller's books (i.e., without revaluation). Also provided that the return on equity capital on assets purchased from a previous owner (change of ownership) is limited to the amount that would be payable if the return were calculated on the depreciated value of the assets on the previous owner's books at the time of the sale.

Public Law 99-272: Provided that payments to proprietary hospitals for a return on equity (ROE) are separated from payments for other capital costs and phased out as follows: for hospital cost reporting periods beginning in fiscal year 1987, payment will equal 75 percent of the otherwise allowable ROE amount; for fiscal year 1988, 50 percent; for fiscal year 1989, 25 percent; and for fiscal year 1990 and thereafter, no ROE payments will be made.

Public Law 99-509: Reduced payment amounts for capital-related costs by 3.5 percent for portions of cost-reporting periods in fiscal year 1987, 7 percent for fiscal year 1988, and 10 percent for fiscal year 1989. The legislation exempts sole community hospitals from capital-related payment reductions and regulations for 3 years. It also clarifies that the HHS Secretary may incorporate capital-related costs, on a budget neutral basis into PPS, effective October 1, 1987.

Public Law 100-119 (the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987): Prohibited the Secretary from implementing published final regulations incorporating payments for capital costs into the DRG payment rates for fiscal year 1988, froze the capital payment reduction at the fiscal year 1987 level (3.5 percent), and delayed the phaseout of ROE payments to proprietary hospitals, for the period from October 1, to November 20, 1987. On November 21, 1987, the capital payment reduction reverted to the 7 percent level established for fiscal year 1988 in OBRA 1986, and the phaseout of ROE payments resumed.

Public Law 100-203: Increased the capital payment reduction to 12 percent for fiscal year 1988, effective on January 1, 1988, and 15 percent in fiscal year 1989. This legislation also prohibits the Secretary from incorporating payment of capital related costs into the PPS payment rates before October 1, 1991. However, the Secretary is required to make payments for capital related costs on a per case, prospective basis beginning on October 1, 1991. The methods to be used in making prospectively determined capital payments are generally left to the discretion of the Secretary. In addition, OBRA 1987 requires ProPAC to undertake a study and report to Congress by May 1, 1988, on the suitability and feasibility of linking payment for capital related costs to hospital occupancy rates.

Public Law 101-239: Extends the 15 percent capital-related payment reduction for portions of cost reporting periods or discharges occurring beginning on January 1, 1990 and continuing through

the remainder of fiscal year 1990. For the period between October 1, 1989 and December 31, 1989, hospitals will receive 100 percent of capital costs, subject to the Gramm-Rudman-Hollings budget sequester reduction of 2.1 percent of total Medicare payments in effect from October 16 through December 31.

Public Law 101-508: Extends the 15 percent capital-related payment reduction for portions of cost reporting periods or discharges occurring in fiscal year 1991. For fiscal years 1992-1995, requires that aggregate payments to PPS hospitals would be reduced by an amount that equals a 10-percent reduction in capital payments based on reasonable cost. Rural primary care hospitals and sole community hospitals are exempt from the capital payment reduction in fiscal year 1991.

56 FR 8476: Proposed rule to change the regulations governing Medicare payments for capital-related costs beginning on or after October 1, 1991.

56 FR 43358: Final rule changing the way inpatient capital-related costs are paid by Medicare. The final rule provides for a 10-year transition to fully prospective payment.

Additional sources of information

- Prospective Payment Assessment Commission. Report and recommendations to the Secretary, U.S. Department of Health and Human Services. [Washington] March 1, 1993. 136 p.
- . Medicare prospective payment and the American health care system: report to the Congress. [Washington] June 1992. 161 p.
- U.S. Congress. House. Committee on Ways and Means. Subcommittee on Health. Budget Issues Relating to Payment Under Part A of the Medicare Program and Payment for Hospital Outpatient and End-Stage Renal Disease Services. Hearing, 103d Congress, 1st Session, March 18, 1993.
- U.S. Congress. Office of Technology Assessment. Medicare's prospective payment system: strategies for evaluating cost, quality, and medical technology. [Washington] U.S. Government Printing Office, October 1985. 232 p. (OTA-H-262)
- U.S. Department of Health and Human Services. Review of the impact of outlier and transfer payment policy upon rural hospitals. Report to Congress. [Washington] May 1988. 70 p.
- . Reimbursement of rural referral centers under the Medicare prospective payment system. Report to Congress. [Washington] Feb. 1988. 100 p.
- . Studies of urban-rural and related geographical adjustments in the Medicare prospective payment system. [Washington] Dec. 1987. 149 p.
- . Reimbursement of sole community hospitals under Medicare's prospective payment system. Report to Congress. [Washington] Dec. 1987. 85 p.
- . Impact of the Medicare Hospital Prospective Payment System 1986 Annual Report. Report to Congress. Washington, May 1989.
- U.S. Department of Health and Human Services. Office of Inspector General. Office of Analysis and Inspections. Hospital closure: 1987. Washington, May 1989.
- . National DRG validation study: Special report on coding accuracy. [Washington] February 1988. 17 p. (Audit Control No. OAI-12-88-01010)
- . National DRG validation study: Special report on premature discharges. [Washington] February 1988. 27 p. (Audit Control No. OAI-05-88-00740)
- U.S. General Accounting Office. Medicare: Improvements Needed in the Identification of Inappropriate Hospital Care; Report to the Chairman, Subcommittee on Health, House Committee on Ways and Means. [Washington] U.S. Government Printing Office, December 1989. 92 p. (GAO)/PEMD-90-7)
- . Medicare: Indirect medical education payments are too high; report to congressional committees. [Washington] U.S. Govt. Print. Off., 1989. 58 p. (GAO/HRD-89-33)
- U.S. Congressional Budget Office. Setting Medicare's Indirect Teaching Adjustment for Hospitals. Washington, May 1989. 28 p.
- . Medicare's Disproportionate Share Adjustment for Hospitals. Washington, May 1990. 71 p.

- . Rural Hospitals and Medicare's Prospective Payment System. December 1991. 55 p.
- U.S. Library of Congress. Congressional Research Service.
- . Medicare, Medicaid, and other health provisions of the Consolidated Budget Reconciliation Act of 1985 (P.L. 99-272 (known as COBRA)) [by] Jennifer O'Sullivan [Washington] 1986. 128 p. CRS Report 86-196 EPW.
- . Medicare, and Medicaid provisions of the Deficit Reduction Act of 1984 (P.L. 98-369) [by] Jennifer O'Sullivan. [Washington] 1985. 94 p. CRS Report 85-27 EPW.
- . Medicare: Prospective Payments for Inpatient Hospital Services [by] Celinda Franco. [Washington] 1987. (Archived) CRS Issue Brief 87180.
- . Rural hospitals, [by] Mark Merlis. Washington, 1989. 108 p. CRS Report 89-296 EPW.
- . Medicare: Payment for Hospital Capital Costs [by] Mark Merlis. [Washington] 1991. (Archived) CRS Issue Brief 91028.
- . Medicare: Description of Hospital Reimbursement of Inpatient Hospital Care Under the Prospective Payment System [by] Celinda Franco. [Washington] 1993. 6 p. CRS Report 93-230.
- . Medicare: FY 1994 Budget [by] Mark Merlis and Richard Price. [Washington] 1993. CRS Issue Brief 93051.

TABLE 19.—WAGE INDEX FOR URBAN AREAS

Urban area (constituent counties or county equivalents)	Wage index
Abilene, TX (Taylor, TX) .....	.9425
Aguadilla, PR (Aguada, PR, Aguadilla, PR, Isabella, PR, Moca, PR) .....	.4566
Akron, OH (Portage, OH, Summit, OH) .....	.8917
Albany, GA (Dougherty, GA, Lee, GA) .....	.8046
Albany-Schenectady-Troy, NY (Albany, NY, Green, NY, Montgomery, NY, Rensselaer, NY, Saratoga, NY, Schenectady, NY) .....	.8953
Albuquerque, NM (Bernalillo, NM)	1.0119
Alexandria, LA (Rapides, LA) .....	.8272
Allentown-Bethlehem-Easton, PA-NJ (Warren, NJ, Carbon, PA, Lehigh, PA, Northampton, PA) .....	.8945
Altoona, PA (Blair, PA) .....	.9235
Amarillo, TX (Potter, TX, Randall, TX) .....	.8735
Anaheim-Santa Ana, CA (Orange, CA)	1.1751
Anchorage, AK	1.4170
Anderson, IN (Madison, IN) .....	.9579
Anderson, SC .....	.7255
Ann Arbor, MI (Washtenaw, MI)	1.1379
Anniston, AL (Calhoun, AL) .....	.7928
Appleton-Oshkosh-Neenah, WI (Calumet, WI, Outagamie, WI, Winnebago, WI) .....	.9219
Arecibo, PR (Arecibo, PR, Camuy, PR, Hatillo, PR, Quebradillas, PR) .....	.3952
Asheville, NC (Buncombe, NC) .....	.8735
Athens, GA (Clarke, GA, Jackson, GA, Madison, GA, Oconee, GA) .....	.7770
Atlanta, GA (Barrow, GA, Butts, GA, Cherokee, GA, Clayton, GA, Cobb, GA, Coweta, GA, De Kalb, GA, Douglas, GA, Fayette, GA, Forsyth, GA, Fulton, GA, Gwinnett, GA, Henry, GA, Newton, GA, Paulding, GA, Rockdale, GA, Spalding, GA, Walton, GA) .....	.9592
Atlantic City, NJ (Atlantic City, Cape May, NJ)	1.0604
Augusta, GA-SC (Columbia, GA, McDuffie, GA, Richmond, GA, Aiken, SC) .....	.9397
Aurora-Elgin, IL (Kane, IL, Kendall, IL) .....	.9459
Austin, TX (Hays, TX, Travis, TX, Williamson, TX) .....	.9595
Bakersfield, CA (Kern, CA)	1.0863
Baltimore, MD (Anne Arundel, MD, Baltimore, MD, Baltimore City, MD, Carroll, MD, Harford, MD, Howard, MD, Queen Annes, MD)	1.0151
Bangor, ME (Penobscot, ME) .....	.9060
Baton Rouge, LA (Ascension, LA, East Baton Rouge, LA, Livingston, LA, West Baton Rouge, LA) .....	.9085
Battle Creek, MI (Calhoun, MI) .....	.9095
Beaumont-Port Arthur, TX (Hardin, TX, Jefferson, TX, Orange, TX) .....	.9600
Beaver County, PA	1.0160
Bellingham, WA (Whatcom, WA)	1.0492
Benton Harbor, MI (Berrien, MI) .....	.8163
Bergen-Passaic, NJ .....	.8370
Billings, MT (Yellowstone, MT) .....	.9321
Biloxi-Gulfport, MS (Hancock, MS, Harrison, MS) .....	.8059
Binghamton, NY (Broome, NY, Tioga, NY) .....	.9256
Birmingham, AL (Blount, AL, Jefferson, AL, Saint Clair, AL, Shelby, AL, Walker, AL) .....	.8766
Bismarck, ND (Burleigh, ND, Morton, ND) .....	.8878
Bloomington, IN (Monroe, IN) .....	.7833
Bloomington-Normal, IL (McLean, IL) .....	.8655
Boise City, ID (Ada, ID) .....	.9753
Boston-Lawrence-Salem-Lowell-Brockton, MA (Essex, MA, Middlesex, MA, Norfolk, MA, Plymouth, MA, Suffolk, MA)	1.1804
Boulder-Longmont, CO (Boulder, CO)	1.0736
Bradenton, FL (Manatee, FL) .....	.8727
Brazoria, TX .....	.8943
Bremerton, WA (Kitsap, WA) .....	.9631
Bridgeport-Stamford-Norwalk-Danbury, CT (Fairfield, CT)	1.1900
Brownsville-Harlingen, TX (Cameron, TX) .....	.8597
Bryan-College Station, TX (Brazos, TX) .....	.9485
Buffalo, NY (Erie, NY) .....	.8905
Burlington, NC (Alamance, NC) .....	.7936
Burlington, VT (Chittenden, VT, Grand Isle, VT) .....	.9354
Caguas, PR (Caguas, PR, Gurabo, PR, San Lorenz, PR, Aguas Buenas, PR, Cayey, PR, Cidra, PR) .....	.4586
Canton, OH (Carroll, OH, Stark, OH) .....	.8449

TABLE 19.—WAGE INDEX FOR URBAN AREAS—Continued

Urban area (constituent counties or county equivalents)	Wage index
Casper, WY (Natrona, WY)	8887
Cedar Rapids, IA (Linn, IA)	7528
Champaign-Urbana-Rantoul, IL	8741
Charleston, SC (Berkeley, SC, Charleston, SC, Dorchester, SC)	8328
Charleston, WV (Kanawha, WV, Putnam, WV)	9688
Charlotte-Gastonia-Rock Hill, NC-SC (Cabarrus, NC, Gaston, NC, Lincoln, NC, Mecklenburg, NC, Rowan, NC, Union, NC, York, SC)	9462
Charlottesville, VA (Albemarle, VA, Charlottesville City, VA, Fluvanna, VA, Greene, VA)	9611
Chattanooga, TN-GA (Catoosa, GA, Dade, GA, Walker, GA, Hamilton, TN, Marion, TN, Sequatchie, TN)	9194
Cheyenne, WY (Laramie, WY)	7773
Chicago, IL (Cook, IL, Du Page, IL, McHenry, IL)	1.0513
Chico, CA (Butte, CA)	1.0977
Cincinnati, OH-KY-IN (Dearborn, IN, Boone, KY, Campbell, KY, Kenton, KY, Clermont, OH, Hamilton, OH, Warren, OH)	9817
Clarksville-Hopkinsville, TN-KY (Christian, KY, Montgomery, TN)	7379
Cleveland, OH (Cuyahoga, OH, Geauga, OH, Lake, OH, Medina, OH)	1.0734
Colorado Springs, CO (El Paso, CO)	9812
Columbia, MO (Boone, MO)	9502
Columbia, SC (Lexington, SC, Richland, SC)	8937
Columbus, GA-AL (Russell, AL, Chattahoochee, GA, Muscogee, GA)	7368
Columbus, OH (Delaware, OH, Fairfield, OH, Franklin, OH, Licking, OH, Madison, OH, Pickaway, OH, Union, OH)	9669
Corpus Christi, TX (Nueces, TX, San Patricio, TX)	8590
Cumberland, MD-WV (Allegeny, MD, Mineral, WV)	8184
Dallas, TX (Collin, TX, Dallas, TX, Denton, TX, Ellis, TX, Kaufman, TX, Rockwall, TX)	9634
Danville, VA (Danville City, VA, Pittsylvania, VA)	7823
Davenport-Rock Island-Moline, IA-IL (Scott, IA, Henry, IL, Rock Island, IL)	8467
Dayton-Springfield, OH (Clark, OH, Greene, OH, Miami, OH, Montgomery, OH)	9727
Daytona Beach, FL (Volusia, FL)	8903
Decatur, AL (Lawrence, AL, Limestone, AL, Morgan, AL)	7484
Decatur, IL (Macon, IL)	8282
Denver, CO (Adams, CO, Arapahoe, CO, Denver, CO, Douglas, CO, Jefferson, CO)	1.0753
Des Moines, IA (Dallas, IA, Polk, IA, Warren, IA)	9167
Detroit, MI (Lapeer, MI, Livingston, MI, Macomb, MI, Monroe, MI, Oakland, MI, Saint Clair, MI, Wayne, MI)	1.0822
Dothan, AL (Dale, AL, Houston, AL)	7566
Dubuque, IA	8371
Duluth, MN-WI (St. Louis, MN, Douglas, WI)	9513
Eau Claire, WI (Chippewa, WI, Eau Claire, WI)	8484
El Paso, TX	8710
Elkhart-Goshen, IN (Elkhart, IN)	7833
Elmira, NY (Chemung, NY)	8848
Enid, OK (Garfield, OK)	8909
Erie, PA	9151
Eugene-Springfield, OR (Lane, OR)	1.0159
Evansville, IN-KY (Posey, IN, Vanderburgh, IN, Warrick, IN, Henderson, KY)	9423
Fargo-Moorhead, ND-MN (Clay, MN, Cass, ND)	9702
Fayetteville, NC (Cumberland, NC)	8292
Fayetteville-Springdale, AR (Washington, AR)	7986
Flint, MI (Genesee, MI, Shiawassee, MI)	1.1539
Florence, AL (Colbert, AL, Lauderdale, AL)	7714
Florence, SC	8425
Fort Collins-Loveland, CO (Larimer, CO)	1.0234
Fort Lauderdale-Hollywood-Pompano Beach, FL (Broward, FL)	1.0352
Fort Myers-Cape Coral, FL (Lee, FL)	8795
Fort Pierce, FL (Martin, FL, St. Lucie, FL)	1.1036
Fort Smith, AR-OK (Crawford, AR, Sebastian, AR, Sequoyah, OK)	7928
Fort Walton Beach, FL (Okaloosa, FL)	8937
Fort Wayne, IN (Allen, IN, De Kalb, IN, Whitley, IN)	8999
Fort Worth-Arlington, TX (Johnson, TX, Parker, TX, Tarrant, TX)	9743

TABLE 19.—WAGE INDEX FOR URBAN AREAS—Continued

Urban area (constituent counties or county equivalents)	Wage index
Fresno, CA.....	1.0733
Gadsden, AL (Etowah, AL).....	.8196
Gainesville, FL (Alachua, FL, Bradford, FL).....	.8795
Galveston-Texas City, TX (Galveston, TX).....	.9424
Gary-Hammond, IN (Lake, IN, Porter, IN).....	.9592
Glens Falls, NY (Warren, NY, Washington, NY).....	.9227
Grand Forks, ND.....	.9573
Grand Rapids, MI (Kent, MI, Ottawa, MI).....	.9879
Great Falls, MT (Cascade, MT).....	.9987
Greeley, CO (Weld, CO).....	.9354
Green Bay, WI (Brown, WI).....	.9581
Greensboro-Winston-Salem-High Point, NC (Davidson, NC, Davie, NC, Forsyth, NC, Guilford, NC, Randolph, NC, Stokes, NC, Yadkin, NC).....	.9161
Greenville-Spartanburg, SC (Greenville, SC, Pickens, SC, Spartanburg, SC).....	.8919
Hagerstown, MD (Washington, MD).....	.9154
Hamilton-Middletown, OH (Butler, OH).....	.9149
Harrisburg-Lebanon-Carlisle, PA (Cumberland, PA, Dauphin, PA, Lebanon, PA, Perry, PA).....	.9914
Hartford-Middletown-New Britain-Bristol, CT (Hartford, CT, Litchfield, CT, Middlesex, CT, Tolland, CT).....	1.1905
Hickory, NC (Alexander, NC, Burke, NC, Catawba, NC).....	.8663
Honolulu, HI.....	1.1575
Houma-Thibodaux, LA (Lafourche, LA, Terrebonne, LA).....	.7341
Houston, TX (Fort Bend, TX, Harris, TX, Liberty, TX, Montgomery, TX, Waller, TX).....	.9931
Huntington-Ashland, WV-KY-OH (Boyd, KY, Carter, KY, Greenup, KY, Lawrence, OH, Cabell, WV, Wayne, WV).....	.9434
Huntsville, AL (Madison, AL).....	.8831
Indianapolis, IN (Boone, IN, Hamilton, IN, Hancock, IN, Hendricks, IN, Johnson, IN, Marion, IN, Morgan, IN, Shelby, IN).....	.9658
Iowa City, IA (Johnson, IA).....	.9524
Jackson, MI.....	.8882
Jackson, MS (Hinds, MS, Madison, MS, Rankin, MS).....	.7730
Jackson, TN (Madison, TN).....	.8325
Jacksonville, FL (Clay, FL, Duval, FL, Nassau, FL, St. Johns, FL).....	.9047
Jacksonville, NC (Onslow, NC).....	.7936
Jamestown-Dunkirk, NY.....	.6631
Janesville-Beloit, WI (Rock, WI).....	.8443
Jersey City, NJ (Hudson, NJ).....	1.0648
Johnson City-Kingsport-Bristol, TN-VA (Carter, TN, Hawkins, TN, Sullivan, TN, Unicoi, TN, Washington, TN, Bristol City, VA, Scott, VA, Washington, VA).....	.8665
Johnstown, PA (Cambria, PA, Somerset, PA).....	.8609
Joliet, IL (Grundy, IL, Will, IL).....	1.0504
Joplin, MO (Jasper, MO, Newton, MO).....	.7953
Kalamazoo, MI.....	1.1705
Kankakee, IL.....	.8485
Kansas City, KS-MO (Johnson, KS, Leavenworth, KS, Miami, KS, Wyandotte, KS, Cass, MO, Clay, MO, Jackson, MO, Lafayette, MO, Platte, MO, Ray, MO).....	.9584
Kenosha, WI.....	.8851
Killeen-Temple, TX (Bell, TX, Coryell, TX).....	1.1290
Knoxville, TN (Anderson, TN, Blount, TN, Grainger, TN, Jefferson, TN, Knox, TN, Sevier, TN, Union, TN).....	.8689
Kokomo, IN (Howard, IN, Tipton, IN).....	.9486
LaCrosse, WI.....	.8952
Lafayette, LA (Lafayette, LA, St. Martin, LA).....	.8223
Lafayette, IN (Tippecanoe, IN).....	.8619
Lake Charles, LA (Calcasieu, LA).....	.8371
Lake County, IL (Lake, IL).....	.9404
Lakeland-Winter Haven, FL (Polk, FL).....	.7939
Lancaster, PA (Lancaster, PA).....	.9274
Lansing-East Lansing, MI (Clinton, MI, Eaton, MI, Ingham, MI).....	1.0218
Laredo, TX (Webb, TX).....	.7275
Las Cruces, NM (Dona Ana, NM).....	.7906

TABLE 19.—WAGE INDEX FOR URBAN AREAS—Continued

Urban area (constituent counties or county equivalents)	Wage index
Las Vegas, NV (Clark, NV)	1.0626
Lawrence, KS (Douglas, KS) .....	.7443
Lawton, OK (Comanche, OK) .....	.8384
Lewiston-Auburn, ME (Androscoggin, ME) .....	.8324
Lexington-Fayette, KY (Bourbon, KY, Clark, KY, Fayette, KY, Jessamine, KY, Scott, KY, Woodford, KY) .....	.8443
Lima, OH (Allen, OH, Auglaize, OH) .....	.8449
Lincoln, NE (Lancaster, NE) .....	.8952
Little Rock-North Little Rock, AR (Faulkner, AR, Lonoke, AR, Pulaski, AR, Saline, AR) .....	.8416
Longview-Marshall, TX (Gregg, TX, Harrison, TX) .....	.8688
Lorain-Elyria, OH (Lorain, OH) .....	.8892
Los Angeles-Long Beach, CA (Los Angeles, CA)	1.2352
Louisville, KY-IN (Clark, IN, Floyd, IN, Harrison, IN, Bullitt, KY, Jefferson, KY, Oldham, KY, Shelby, KY) .....	.9088
Lubbock, TX .....	.8786
Lynchburg, VA (Amherst, VA, Campbell, VA, Lynchburg City, VA) .....	.8540
Macon-Warner Robins, GA (Bibb, GA, Houston, GA, Jones, GA, Peach, GA) .....	.8800
Madison, WI (Dane, WI)	1.0307
Manchester-Nashua, NH (Hillsborough, NH, Merrimack, NH)	1.0126
Mansfield, OH (Richland, OH) .....	.8389
Mayaguez, PR (Anasco, PR, Cabo Rojo, PR, Hormigueros, PR, Mayaguez, PR, San German, PR) .....	.4769
McAllen-Edinburg-Mission, TX (Hidalgo, TX) .....	.7712
Medford, OR (Jackson, OR)	1.0041
Melbourne-Titusville, FL (Brevard, FL) .....	.8727
Memphis, TN-AR-MS (Crittenden, AR, De Soto, MS, Shelby, TN, Tipton, TN) .....	.9056
Merced, CA	1.0310
Miami-Hialeah, FL (Dade, FL) .....	.9950
Middlesex-Somerset-Hunterdon, NJ (Hunterdon, NJ, Middlesex, NJ, Somerset, NJ)	1.0405
Midland, TX	1.0372
Milwaukee, WI (Milwaukee, WI, Ozaukee, WI, Washington, WI, Waukesha, WI) .....	.9715
Minneapolis-St. Paul, MN-WI (Anoka, MN, Carver, MN, Chisago, MN, Dakota, MN, Hennepin, MN, Isanti, MN, Ramsey, MN, Scott, MN, Washington, MN, Wright, MN, St. Croix, WI)	1.0813
Mobile, AL (Baldwin, AL, Mobile, AL) .....	.8241
Modesto, CA (Stanislaus, CA)	1.1383
Monmouth-Ocean, NJ (Monmouth, NJ, Ocean, NJ) .....	.9940
Monroe, LA (Ouachita, LA) .....	.7860
Montgomery, AL (Autauga, AL, Elmore, AL, Montgomery, AL) .....	.7735
Muncie, IN (Delaware, IN) .....	.8427
Muskegon, MI .....	.9849
Naples, FL (Collier, FL)	1.0320
Nashville, TN (Cheatham, TN, Davidson, TN, Dickson, TN, Robertson, TN, Rutherford, TN, Sumner, TN, Williamson, TN, Wilson, TN) .....	.9393
Nassau-Suffolk, NY (Nassau, NY, Suffolk, NY)	1.2149
New Bedford-Fall River-Attleboro, MA (Bristol, MA)	1.1708
New Haven-West Haven-Waterbury-Meriden, CT (New Haven, CT)	1.2090
New London-Norwich, CT (New London, CT)	1.1566
New Orleans, LA (Jefferson, LA, Orleans, LA, St. Bernard, LA, St. Charles, LA, St. John The Baptist, LA, St. Tammany, LA) .....	.8985
New York, NY (Bronx, NY, Kings, NY, New York City, NY, Putnam, NY, Queens, NY, Richmond, NY, Rockland, NY, Westchester, NY)	1.3455
Newark, NJ (Essex, NJ, Morris, NJ, Sussex, NJ, Union, NJ)	1.0734
Niagara Falls, NY .....	.8398
Norfolk-Virginia Beach-Newport News, VA (Chesapeake City, VA, Gloucester, VA, Hampton City, VA, James City Co., VA, Newport News City, VA, Norfolk City, VA, Poquoson, VA, Portsmouth City, VA, Suffolk City, VA, Virginia Beach City, VA, Williamsburg City, VA, York, VA) .....	.8511
Oakland, CA (Alameda, CA, Contra Costa, CA)	1.4128
Ocala, FL (Marion, FL) .....	.8611
Odessa, TX (Ector, TX)	1.0835
Oklahoma City, OK (Canadian, OK, Cleveland, OK, Logan, OK, McClain, OK, Oklahoma, OK, Pottawatomie, OK) .....	.9228
Olympia, WA (Thurston, WA)	1.0997

TABLE 19.—WAGE INDEX FOR URBAN AREAS—Continued

Urban area (constituent counties or county equivalents)	Wage index
Omaha, NE-IA (Pottawattamie, IA, Douglas, NE, Sarpy, NE, Washington, NE) .....	.8985
Orange County, NY (Orange, NY) .....	.9193
Orlando, FL (Orange, FL, Osceola, FL, Seminole, FL) .....	.9617
Owensboro, KY (Daviess, KY) .....	.8148
Oxnard-Ventura, CA (Ventura, CA)	1.1787
Panama City, FL (Bay, FL) .....	.8629
Parkersburg-Marietta, WV-OH (Washington, OH, Wood, WV) .....	.8536
Pascagoula, MS (Jackson, MS) .....	.8767
Pensacola, FL (Escambia, FL, Santa Rosa, FL) .....	.8620
Peoria, IL (Peoria, IL, Tazewell, IL, Woodford, IL) .....	.8706
Philadelphia, PA-NJ (Burlington, NJ, Camden, NJ, Gloucester, NJ, Bucks, PA, Chester, PA, Delaware, PA, Montgomery, PA, Philadelphia, PA)	1.0947
Phoenix, AZ (Maricopa, AZ)	1.0424
Pine Bluff, AR (Jefferson, AR) .....	.6976
Pittsburgh, PA (Allegheny, PA, Fayette, PA, Washington, PA, Westmoreland, PA)	1.0123
Pittsfield, MA (Berkshire, MA)	1.0778
Ponce, PR (Juana Diaz, PR, Ponce, PR) .....	.4599
Portland, ME (Cumberland, MD, Sagadahoc, ME, York, ME) .....	.9253
Portland, OR (Clackamas, OR, Multnomah, OR, Washington, OR, Yamhill, OR)	1.1571
Portsmouth-Dover-Rochester, NH (Rockingham, NH, Strafford, NH)	1.0042
Poughkeepsie, NY (Dutchess, NY)	1.0443
Providence-Pawtucket-Woonsocket, RI (Bristol, RI, Kent, RI, Newport, RI, Providence, RI, Washing- ton, RI)	1.0291
Provo-Orem, UT (Utah, UT)	1.0226
Pueblo, CO (Pueblo, CO) .....	.8718
Racine, WI .....	.9627
Raleigh-Durham, NC (Durham, NC, Franklin, NC, Orange, NC, Wake, NC) .....	.9461
Rapid City, SD (Pennington, SD) .....	.8396
Reading, PA (Berks, PA)	1.0267
Redding, CA (Shasta, CA)	1.0545
Reno, NV (Washoe, NV)	1.1613
Richland-Kennewick, WA (Benton, WA, Franklin, WA) .....	.9398
Richmond-Petersburg, VA (Charles City Co., VA, Chesterfield, VA, Colonial Heights City, VA, Dinwiddie, VA, Goochland, VA, Hanover, VA, Henrico, VA, Hopewell City, VA, New Kent, VA, Petersburg City, VA, Powhatan, VA, Prince George, VA, Richmond City, VA) .....	.9413
Riverside-San Bernardino, CA (Riverside, CA, San Bernardino, CA)	1.1103
Roanoke, VA (Botetourt, VA, Roanoke, VA, Roanoke City, VA, Salem City, VA) .....	.8281
Rochester, MN (Olmsted, MN)	1.1025
Rochester, NY (Livingston, NY, Monroe, NY, Ontario, NY, Orleans, NY, Wayne, NY) .....	.9706
Rockford, IL (Boone, IL, Winnebago, IL) .....	.9279
Sacramento, CA (Eldorado, CA, Placer, CA, Sacramento, CA, Yolo, CA)	1.2257
Saginaw-Bay City-Midland, MI (Bay, MI, Midland, MI, Saginaw, MI)	1.0479
St. Cloud, MN (Benton, MN, Sherburne, MN, Stearns, MN) .....	.8915
St. Joseph, MO (Buchanan, MO) .....	.9410
St. Louis, MO-IL (Clinton, IL, Jersey, IL, Madison, IL, Monroe, IL, St. Clair, IL, Franklin, MO, Jefferson, MO, St. Charles, MO, St. Louis, MO, St. Louis City, MO) .....	.9384
Salem, OR (Marion, OR, Polk, OR) .....	.9833
Salinas-Seaside-Monterey, CA (Monterey, CA)	1.3035
Salt Lake City-Ogden, UT (Davis, UT, Salt Lake, UT, Weber, UT) .....	.9928
San Angelo, TX (Tom Green, TX) .....	.8136
San Antonio, TX (Bexar, TX, Comal, TX, Guadalupe, TX) .....	.8448
San Diego, CA	1.1929
San Francisco, CA (Marin, CA, San Francisco, CA, San Mateo, CA)	1.4521
San Jose, CA (Santa Clara, CA)	1.4893
San Juan, PR (Barcelona, PR, Bayamon, PR, Canovanas, PR, Carolina, PR, Catano, PR, Corozal, PR, Dorado, PR, Fajardo, PR, Florida, PR, Guaynabo, PR, Humacao, PR, Juncos, PR, Los Piedras, PR, Loiza, PR, Lugoillo, PR, Manati, PR, Naranlito, PR, Rio Grande, PR, San Juan, PR, Toa, Alta, PR, Toa Baia, PR, Trojilo Alto, PR, Vega Alta, PR, Vega Baja, PR) .....	.4985
Santa Barbara-Santa Mariaslompoc, CA (Santa Barbara, CA)	1.1800
Santa Cruz, CA	1.1814
Santa Fe, NM (Los Alamos, NM, Santa Fe, NM) .....	.9158

TABLE 19.—WAGE INDEX FOR URBAN AREAS—Continued

Urban area (constituent counties or county equivalents)	Wage index
Santa Rosa-Petaluma, CA (Sonoma, CA)	1.2973
Sarasota, FL	0.9777
Savannah, GA (Chatham, GA, Effingham, GA)	0.8324
Scranton-Wilkes Barre, PA (Columbia, PA, Lackawanna, PA, Luzerne, PA, Monroe, PA, Wyoming, PA)	0.8912
Seattle, WA (King, WA, Snohomish, WA)	1.0866
Sharon, PA (Mercer, PA)	0.8910
Sheboygan, WI	0.8868
Sherman-Denison, TX (Grayson, TX)	0.9085
Shreveport, LA (Bossier, LA, Caddo, LA)	0.9295
Sioux City, IA-NE (Woodbury, IA, Dakota, NE)	0.8500
Sioux Falls, SD (Minnehaha, SD)	0.8829
South Bend-Mishawaka, IN (St. Joseph, IN)	1.0179
Spokane, WA	1.0687
Springfield, IL (Menard, IL, Sangamon, IL) .....	.9292
Springfield, MO (Christian, MO, Greene, MO) .....	.8079
Springfield, MA (Hampden, MA, Hampshire, MA) .....	.9614
State College, PA (Centre, PA) .....	.9897
Steubenville-Weirton, OH-WV (Jefferson, OH, Brooke, WV, Hancock, WV) .....	.8708
Stockton, CA (San Joaquin, CA)	1.1784
Syracuse, NY (Madison, NY, Onondaga, NY, Oswego, NY) .....	.9912
Tacoma, WA (Pierce, WA) .....	.9631
Tallahassee, FL (Gadsden, FL, Leon, FL) .....	.9216
Tampa-St. Petersburg-Clearwater, FL (Hernando, FL, Hillsborough, FL, Pasco, FL, Pinellas, FL) .....	.9244
Terre Haute, IN (Clay, IN, Vigo, IN) .....	.8823
Texarkana-TX-Texarkana, AR (Miller, AR, Bowie, TX) .....	.7903
Toledo, OH (Fulton, OH, Lucas, OH, Wood, OH) .....	.8710
Topeka, KS (Shawnee, KS) .....	.9299
Trenton, NJ	1.0034
Tucson, AZ (Pima, AZ) .....	.9616
Tulsa, OK (Creeks, OK, Osage, OK, Rogers, OK, Tulsa, OK, Wagoner, OK) .....	.8573
Tuscaloosa, AL .....	.8518
Tyler, TX (Smith, TX) .....	.9833
Utica-Rome, NY (Herkimer, NY, Oneida, NY) .....	.8398
Vallejo-Fairfield-Napa, CA (Napa, CA, Solano, CA)	1.2912
Vancouver, WA (Clark, WA)	1.0708
Victoria, TX .....	.8990
Vineland-Millville-Bridgeton, NJ (Cumberland, NJ) .....	.9645
Visalia-Tulare-Porterville, CA (Tulare, CA)	1.0388
Waco, TX (McLennan, TX) .....	.7811
Washington, D.C.-MD-VA (District of Columbia, DC, Calvert, MD, Charles, MD, Frederick, MD, Montgomery, MD, Prince Georges, MD, Alexandria City, VA, Arlington, VA, Fairfax, VA, Fairfax City, VA, Falls Church City, VA, Loudoun, VA, Manassas City, VA, Manassas Park City, VA, Prince William, VA, Stafford, VA)	1.0936
Waterloo-Cedar Falls, IA (Black Hawk, IA, Bremer, IA) .....	.8639
Wausau, WI (Marathan, WI) .....	.9744
West Palm Beach-Boca Raton-Delray Beach, FL (Palm Beach, FL)	1.0227
Wheeling, WV-OH (Belmont, OH, Marshall, WV, Ohio, WV) .....	.6923
Wichita, KS (Butler, KS, Harvey, KS, Sedgwick, KS) .....	.9805
Wichita Falls, TX (Wichita, TX) .....	.8169
Williamsport, PA (Lycoming, PA) .....	.8861
Wilmington, DE-NJ-MD (New Castle, DE, Cecil, MD, Salem, NJ)	1.0880
Wilmington, NC (New Hanover, NC) .....	.8708
Worcester-Fitchburg-Leominster, MA (Worcester, MA) .....	.9682
Yakima, WA	1.0107
York, PA (Adams, PA, York, PA) .....	.8609
Youngstown-Warren, OH (Mahoning, OH, Trumbull, OH) .....	.9862
Yuba City, CA (Sutter, CA, Yuba, CA)	1.0159
Yuma, AZ .....	.8743

Source: Federal Register, August 30, 1991.

TABLE 20.—WAGE INDEX FOR RURAL AREAS

Nonurban area	Wage index	Nonurban area	Wage index
Alabama.....	0.7130	Missouri.....	.7246
Alaska.....	1.3492	Montana.....	.8251
Arizona.....	.8743	Nebraska.....	.6992
Arkansas.....	.6976	Nevada.....	.9698
California.....	1.0159	New Hampshire.....	.9543
		New Mexico.....	.8317
Colorado.....	.8412	New York.....	.8398
Connecticut.....	1.1900	North Carolina.....	.7936
Delaware.....	.8568	North Dakota.....	.7715
Florida.....	.8727	Ohio.....	.8449
Georgia.....	.7770	Oklahoma.....	.7399
		Oregon.....	.9603
Hawaii.....	.9614	Pennsylvania.....	.8609
Idaho.....	.9101	Puerto Rico.....	.4331
Illinois.....	.7696	South Carolina.....	.7657
Indiana.....	.7833		
Iowa.....	.7528	South Dakota.....	.7165
		Tennessee.....	.7337
Kansas.....	.7443	Texas.....	.7592
Kentucky.....	.7790	Utah.....	.9040
Louisiana.....	.7381	Vermont.....	.9702
Maine.....	.8324		
Maryland.....	.8058	Virginia.....	.7823
		Virgin Islands.....	(¹)
Massachusetts.....	1.1708	Washington.....	.9631
Michigan.....	.8882	West Virginia.....	.8484
Minnesota.....	.8305	Wisconsin.....	.8443
Mississippi.....	.6960	Wyoming.....	.8453

¹ All counties within State are classified urban.

TABLE 21.—WAGE INDEX FOR HOSPITALS THAT ARE RECLASSIFIED

Area reclassified to—	Wage index	Area reclassified to—	Wage index
Abilene, TX	0.9425	Dubuque, IA .....	.8117
Akron, OH .....	.8917	Duluth, MN-WI .....	.9390
Albany, GA .....	.7894	Eau Claire, WI .....	.8484
Albany-Schenectady-Troy, NY .....	.8953	El Paso, TX .....	.8710
Albuquerque, NM .....	.9938	Elkhart-Goshen, IN .....	.8868
Alexandria, LA .....	.8046	Elmira, NY .....	.8655
Allentown-Bethlehem, Easton, PA .....	.8945	Erie, PA .....	.9151
Altoona, PA .....	.9235	Eugene-Springfield, OR	1.0159
Amarillo, TX .....	.8735	Evansville, IN-KY .....	.9068
Anaheim-Santa Ana, CA	1.1540	Fargo-Moorhead, ND-MN .....	.9312
Anchorage, AK	1.3995	Fayetteville, NC .....	.7892
Ann Arbor, MI	1.1058	Fayetteville-Springdale, AR .....	.7986
Appleton-Oshkosh-Neenah, WI .....	.8695	Flint, MI	1.1203
Asheville, NC .....	.8468	Florence, AL .....	.7714
Athens, GA .....	.7214	Florence, SC .....	.8425
Atlanta, GA .....	.9474	Fort Collins-Loveland, CO	1.0027
Augusta, GA .....	.9397	Fort Lauderdale-Hollywood-Pompa, FL	1.0229
Aurora-Elgin, IL .....	.8870	Fort Myers-Cape Coral, FL .....	.9795
Baltimore, MD	1.0151	Fort Pierce, FL	1.0256
Bangor, ME .....	.8797	Fort Smith, AR .....	.7928
Baton Rouge, LA .....	.9085	Fort Walton Beach, FL .....	.8937
Battle Creek, MI .....	.9095	Fort Wayne, IN .....	.8724
Beaver County, PA .....	.9447	Fort Worth-Arlington, TX .....	.9743
Billings, MT .....	.9045	Fresno, CA	1.0619
Biloxi-Gulfport, MS .....	.7801	Galveston-Texas City, TX .....	.9424
Binghamton, NY .....	.8864	Glens Falls, NY .....	.8985
Birmingham, AL .....	.8766	Grand Forks, ND .....	.9205
Bismark, ND .....	.8878	Grand Rapids, MI .....	.9879
Bloomington, IN .....	.7754	Great Falls, MT .....	.9258
Boise City, ID .....	.9554	Greeley, CO .....	.8952
Boston-Lowell-Brockton-Lawrence, MA	1.1561	Green Bay, WI .....	.9274
Brazoria, TX .....	.8789	Greensboro-Winston Salem-High Point, NC..	.8988
Bremerton, WA	1.0361	Greenville-Spartanburg, SC .....	.8772
Buffalo, NY .....	.8773	Hagerstown, MD .....	.8754
Burlington, VT .....	.9014	Hamilton-Middletown, OH .....	.8431
Caguas, PR .....	.4586	Harrisburg-Lebanon-Carlise, PA .....	.9386
Canton, OH .....	.8062	Hartford-Middletown-New Britain-Bristol,	
Casper, WY .....	.8769	CT	1.1803
Champaign-Urbana-Rantoul, IL .....	.8741	Hickory, NC .....	.8421
Charleston, SC .....	.8168	Honolulu, HI	1.1575
Charleston, WV .....	.9535	Houston, TX .....	.9931
Charlotte-Gastonia-Rock Hill, NC .....	.9281	Huntington-Ashland, WV-KY-OH .....	.9251
Charlottesville, VA .....	.9370	Huntsville, AL .....	.8477
Chattanooga, TN-GA .....	.8875	Indianapolis, IN .....	.9556
Cheyenne, WY .....	.7496	Iowa City, IA .....	.9323
Chicago, IL	1.0513	Jackson, MI .....	.8822
Chico, CA	1.0845	Jackson, MS .....	.7590
Cincinnati, OH-KY-IN .....	.9817	Jackson, TN .....	.8069
Cleveland, OH	1.0470	Jacksonville, FL .....	.9047
Columbia, MO .....	.9265	Johnson City-Kingsport-Bristol, TN-VA .....	.8665
Columbia, SC .....	.8745	Johnstown, PA .....	.8335
Columbus, GA-AL .....	.7368	Joliet, IL	1.0207
Columbus, OH .....	.9515	Joplin, MO .....	.7835
Dallas, TX .....	.9634	Kalamazoo, MI	1.1189
Davenport-Rock Island-Moline, IA .....	.8342	Kansas City, MO-KS .....	.9584
Dayton-Springfield, OH .....	.9727	Knoxville, TN .....	.8689
Daytona Beach, FL .....	.8903	Kokomo, IN .....	.9115
Decatur, AL .....	.7484	La Crosse, WI .....	.8743
Denver, CO	1.0753	Lafayette, LA .....	.8223
Des Moines, IA .....	.9028	Lafayette, IN .....	.8619
Detroit, MI	1.0704	Lake Charles, LA .....	.8371
Dothan, AL .....	.7566	Lancaster, PA .....	.9092

TABLE 21.—WAGE INDEX FOR HOSPITALS THAT ARE RECLASSIFIED—Continued

Area reclassified to—	Wage index	Area reclassified to—	Wage index
Lansing-East Lansing, MI.....	1.0041	Raleigh-Durham, NC.....	.9193
Las Vegas, NV.....	1.0484	Rapid City, SD.....	.8280
Lawrence, KS.....	.7501	Redding, CA.....	1.0401
Lawton, OK.....	.8282	Reno, NV.....	1.1433
Lewiston-Auburn, ME.....	.8454	Roanoke, VA.....	.8163
Lexington-Fayette, KY.....	.8320	Rochester, NY.....	.9560
Lincoln, NE.....	.8458	Rockford, IL.....	.9091
Little Rock-North Little Rock, AR.....	.8204	Sacramento, CA.....	1.2257
Longview-Marshall, TX.....	.8517	Saginaw-Bay City-Midland, MI.....	1.0206
Lorain-Elyria, OH.....	.8892	St. Cloud, MN.....	.8915
Los Angeles-Long Beach, CA.....	1.2352	St. Louis, MO-IL.....	.9236
Louisville, KY-IN.....	.8965	Salem, OR.....	.9833
Lubbock, TX.....	.8786	Salinas-Seaside-Monterey, CA.....	1.2893
Lynchburg, VA.....	.8386	Salt Lake City-Ogden, UT.....	.9928
Macon-Warner Robins, GA.....	.8618	San Angelo, TX.....	.8136
Madison, WI.....	.9787	San Antonio, TX.....	.8448
Manchester-Nashua, NH.....	1.0126	San Diego, CA.....	1.1929
Mansfield, OH.....	.8389	San Francisco, CA.....	1.4521
Medford, OR.....	.9880	San Jose, CA.....	1.4715
Memphis, TN-AR-MS.....	.8769	San Juan, PR.....	.4985
Merced, CA.....	1.0310	Santa Barbara-Santa Maria-Lompoc, CA.....	1.1631
Miami-Hialeah, FL.....	.9950	Santa Fe, NM.....	.8852
Middlesex-Somerset-Hunterdon, NJ.....	.9923	Santa Rosa-Petaluma, CA.....	1.2973
Midland, TX.....	1.0372	Sarasota, FL.....	.9442
Milwaukee, WI.....	.9599	Scranton-Wilkes Barre, PA.....	.8912
Minneapolis-St. Paul, MN-WI.....	1.0813	Seattle, WA.....	1.0715
Mobile, AL.....	.8241	Sharon, PA.....	.8910
Modesto, CA.....	1.1383	Sheboygan, WI.....	.8719
Monroe, LA.....	.7860	Sherman-Denison, TX.....	.8930
Montgomery, AL.....	.7735	Shreveport, LA.....	.9295
Muncie, IN.....	.8270	Sioux City, IA-NE.....	.8320
Nashville, TN.....	.9393	Sioux Falls, SD.....	.8829
New London-Norwich, CT.....	1.1290	South Bend-Mishawaka, IN.....	.9684
New Orleans, LA.....	.8985	Spokane, WA.....	1.0687
New York, NY.....	1.3455	Springfield, IL.....	.9189
Newark, NJ.....	1.0613	Springfield, MO.....	.7912
Norfolk-Virginia Beach-Newport News, VA.....	.8511	State College, PA.....	.9324
Oakland, CA.....	1.4128	Steubenville-Weirton, OH-WV.....	.8336
Odessa, TX.....	1.0835	Stockton, CA.....	1.1784
Oklahoma City, OK.....	.9228	Syracuse, NY.....	.9510
Olympia, WA.....	1.0386	Tacoma, WA.....	.9863
Omaha, NE-IA.....	.8985	Tallahassee, FL.....	.8849
Orange County, NY.....	.9193	Tampa-St. Petersburg-Clearwater, FL.....	.9244
Orlando, FL.....	.9442	Terre Haute, IN.....	.8714
Owensboro, KY.....	.8148	Texarkana, TX-Texarkana, AR.....	.7903
Oxnard-Ventura, CA.....	1.1787	Toledo, OH.....	.8710
Panama City, FL.....	.8629	Topeka, KS.....	.9299
Parkersburg-Marietta, WV-OH.....	.8536	Tucson, AZ.....	.9616
Pascagoula, MS.....	.8767	Tulsa, OK.....	.8427
Peoria, IL.....	.8706	Tuscaloosa, AL.....	.8283
Philadelphia, PA-NJ.....	1.0792	Tyler, TX.....	.9326
Phoenix, AZ.....	1.0424	Vallejo-Fairfield-Napa, CA.....	1.2716
Pine Bluff, AR.....	.6976	Vancouver, WA.....	1.0120
Pittsburgh, PA.....	.9950	Victoria, TX.....	.8835
Pittsfield, MA.....	1.0115	Waco, TX.....	.7811
Portland, ME.....	.9106	Washington, DC-MD-VA.....	1.0936
Portland, OR.....	1.1416	Waterloo-Cedar Falls, IA.....	.8639
Portsmouth-Dover-Rochester, NH.....	1.0042	Wausau, WI.....	.9093
Poughkeepsie, NY.....	.9960	West Palm Beach-Boca Raton-Delray Beach, FL.....	1.0227
Providence-Pawtucket-Woonsocket, RI.....	1.0036	Wichita, KS.....	.9559
Provo-Orem, UT.....	.9997	Wichita Falls, TX.....	.8169
Pueblo, CO.....	.8515		

TABLE 21.—WAGE INDEX FOR HOSPITALS THAT ARE RECLASSIFIED—Continued

Area reclassified to—	Wage index	Area reclassified to—	Wage index
Williamsport, PA .....	.8704	Minnesota .....	.8305
Wilmington, NC .....	.8296	Missouri .....	.7246
Worcester-Fitchburg-Leominster, MA .....	.9682	New Hampshire .....	.9543
Yakima, WA .....	.9981	North Carolina .....	.7936
Youngstown-Warren, OH .....	.9503	Ohio .....	.8449
California .....	.9997	Oklahoma .....	.7399
Connecticut	1.1576	Pennsylvania .....	.8609
Georgia .....	.7770	South Dakota .....	.7165
Illinois .....	.7696	Tennessee .....	.7337
Indiana .....	.7833	Texas .....	.7592
Iowa .....	.7528	Utah .....	.9040
Kansas .....	.7443	Virginia .....	.7823
Kentucky .....	.7790	Washington .....	.9425
Louisiana .....	.7381	West Virginia .....	.8484
Michigan .....	.8882	Wisconsin .....	.8443
		Wyoming .....	.8285

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993

DRG	MDC	Type	Title	Weight			Percent change 1992-93
				1987	1991	1992	
1	1	SURG	Craniotomy age > 17 except for trauma	3.5610	3.3580	3.3637	-3.90
2	1	SURG	Craniotomy for trauma age > 17	3.8111	3.5485	3.3233	-5.78
3	1	SURG	Craniotomy age 0-17	2.9183	2.8830	2.8830	2.76
4	1	SURG	Spinal procedures	2.7296	2.4532	2.4577	-3.93
5	1	SURG	Extracranial vascular procedures	1.6508	1.5246	1.5241	1.73
6	1	SURG	Carpal tunnel release	.4073	.4823	.4868	11.69
7	1	SURG	Periph and cranial nerve and other nerv syst proc with CC	1.3866	2.6823	2.7185	-3.02
8	1	SURG	Periph and cranial nerve and other nerv syst proc w/o CC	.7464	.7451	.7730	2.77
9	1	MED	Spinal disorders and injuries	1.4235	1.2229	1.2933	-1.14
10	1	MED	Nervous system neoplasms with CC	1.1322	1.2765	1.2834	.39
11	1	MED	Nervous system neoplasms w/o CC	.9338	.7771	.7545	1.38
12	1	MED	Degenerative nervous system disorders	1.0001	.9256	.9372	1.90
13	1	MED	Multiple sclerosis and cerebellar ataxia	.9790	.8726	.8524	-2.21
14	1	MED	Specific cerebrovascular disorders except TIA	1.3143	1.2212	1.2173	-1.1
15	1	MED	Transient ischemic attack and precerebral occlusions	.6241	.6420	.6524	2.12
16	1	MED	Nonspecific cerebrovascular disorders with CC	.9042	1.0703	1.0824	2.42
17	1	MED	Nonspecific cerebrovascular disorders w/o CC	.6802	.6326	.6331	1.47
18	1	MED	Cranial and peripheral nerve disorders with CC	.7566	.8749	.8971	2.22
19	1	MED	Cranial and peripheral nerve disorders w/o CC	.6549	.5629	.5735	3.89
20	1	MED	Nervous system infection except viral meningitis	1.4087	1.8683	1.9348	3.59
21	1	MED	Viral meningitis	1.3143	1.4439	1.4685	-1.23
22	1	MED	Hypertensive encephalopathy	.7086	.7206	.7190	.99
23	1	MED	Nontraumatic stupor and coma	1.1239	.8322	.8715	-5.89
24	1	MED	Seizure and headache age > 17 with CC	.7642	.9602	.9792	-1.80
25	1	MED	Seizure and headache age > 17 w/o CC	.5520	.5197	.5252	.57
26	1	MED	Seizure and headache age 0-17	.6255	.8176	.8281	26.99
						1.0516	

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993—Continued

DRG	MDC	Type	Title	Weight			Percent change 1992-93
				1987	1991	1992	
27	1	MED	Traumatic stupor and coma, coma > 1 HR	1.5645	1.3481	1.3566	1.3744
28	1	MED	Traumatic stupor and coma, coma < 1 HR age > 17 with CC .....	.9422	1.2060	1.2371	1.2208
29	1	MED	Traumatic stupor and coma, coma < 1 HR age > 17 w/o CC .....	.6462	.5674	.5525	.5885
30	1	MED	Traumatic stupor and coma, coma < 1 HR age 0-17 .....	.3539	.3496	.3496	.3593
31	1	MED	Concussion age > 17 with CC .....	.5381	.6933	.7139	.7707
32	1	MED	Concussion age > 17 w/o CC .....	.4064	.4100	.4145	.4454
33	1	MED	Concussion age 0-17 .....	.2457	.2427	.2427	.2494
34	1	MED	Other disorders of nervous system with CC .....	.9761	1.1714	1.1524	1.1442
35	1	MED	Other disorders of nervous system w/o CC .....	.7383	.5464	.5648	.5590
36	2	SURG	Retinal procedures .....	.7101	.6487	.6434	.6238
37	2	SURG	Orbital procedures .....	.6687	.7431	.7951	.7883
38	2	SURG	Primary iris procedures .....	.3963	.3614	.3532	.3584
39	2	SURG	Lens procedures with or without vitrectomy .....	.5719	.4456	.4732	.4858
40	2	SURG	Extraocular procedures except orbit age > 17 .....	.4133	.4923	.5101	.5150
41	2	SURG	Extraocular procedures except orbit age 0-17 .....	.3657	.3613	.3613	.3713
42	2	SURG	Intraocular procedures retina, iris and lens .....	.6542	.6202	.6162	.5968
43	2	MED	HypHEMA .....	.3461	.3867	.3579	.4026
44	2	MED	Acute major eye infections .....	.6395	.5979	.6119	.5767
45	2	MED	Neurological eye disorders .....	.5407	.5650	.5938	.5989
46	2	MED	Other disorders of the eye age > 17 with CC .....	.6009	.6701	.6709	.7217
47	2	MED	Other disorders of the eye age > 17 w/o CC .....	.4187	.3608	.3923	.4156
48	2	MED	Other disorders of the eye age 0-17 .....	.4018	.3969	.3969	.4079
49	2	SURG	Major head and neck procedures	2.8742	2.3273	2.2790	1.6029
50	2	SURG	Sialoadenectomy .....	.7033	.6413	.6625	.6594
51	3	SURG	Salivary gland procedures except sialoadenectomy .....	.5878	.5822	.5871	.6278
52	3	SURG	Cleft lip and palate repair .....	.6955	.7394	.7451	.7859

53	3	SURG	Sinus and mastoid procedures age > 17	6175	6308	6590	7237	9.82
54	3	SURG	Sinus and mastoid procedures age 0-17	6889	6806	6806	6994	2.76
55	3	SURG	Miscellaneous ear, nose, mouth and throat procedures	4342	4905	5134	5469	6.53
56	3	SURG	Rhinoplasty	4357	4982	5444	6168	13.30
57	3	SURG	T&A proc, except tonsillectomy and/or adenoidectomy only, age > 17	7717	8774	8501	8845	4.05
58	3	SURG	T&A proc, except tonsillectomy and/or adenoidectomy only, age 0-17	3097	3060	3060	3145	2.78
59	3	SURG	Tonsillectomy and/or adenoidectomy only, age > 17	4130	4192	4071	4273	4.96
60	3	SURG	Tonsillectomy and/or adenoidectomy only, age 0-17	2616	2584	2584	2655	2.75
61	3	SURG	Myringotomy with tube insertion age > 17	4273	7565	8065	8613	6.79
62	3	SURG	Myringotomy with tube insertion age 0-17	3089	3052	3052	3136	2.75
63	3	SURG	Other ear, nose, mouth and throat O.R. procedures	11618	10111	10595	10429	-1.57
64	3	MED	Ear, nose, mouth and throat malignancy	9769	10651	11190	11039	-1.35
65	3	MED	Dysequilibrium	4500	4636	4727	4922	4.13
66	3	MED	Epistaxis	4144	4528	4606	4885	6.06
67	3	MED	Epiglottitis	9363	8478	8708	8424	-3.26
68	3	MED	Otitis media and URI age > 17 with CC	6088	7209	7277	7216	-.84
69	3	MED	Otitis media and URI age > 17 w/o CC	5040	5086	5156	5000	-3.03
70	3	MED	Otitis media and URI age 0-17	5251	2830	5295	6126	15.69
71	3	MED	Laryngotracheitis	6582	7030	8197	7664	-6.50
72	3	MED	Nasal trauma and deformity	5216	5547	5741	5844	1.79
73	3	MED	Other ear, nose, mouth, and throat diagnoses age > 17	6045	7291	7500	7522	.29
74	3	MED	Other ear, nose, mouth, and throat diagnoses age 0-17	3427	3386	3386	3480	2.78
75	4	SURG	Major chest procedures	29776	29860	30063	30400	1.12
76	4	SURG	Other resp system O.R. procedures with CC	25663	23074	23804	23973	.71
77	4	SURG	Other resp system O.R. procedures w/o CC	16734	10413	10289	10208	-.79
78	4	MED	Pulmonary embolism	14798	14372	14273	14350	.54
79	4	MED	Respiratory infections and inflammations age > 17 with CC	19344	18144	17813	17510	-1.70
80	4	MED	Respiratory infections and inflammations age > 17 w/o CC	14387	10404	10066	9617	-4.46
81	4	MED	Respiratory infections and inflammations age 0-17	8652	10899	10899	11200	2.76
82	4	MED	Respiratory neoplasms	11258	12178	12453	12809	2.86

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993—Continued

DRG	MDC	Type	Title	Weight			Percent change 1992-93
				1987	1991	1992	
83	4	MED	Major chest trauma with CC.....	.8397	.9628	.9606	-1.21
84	4	MED	Major chest trauma w/o CC.....	.5920	.4846	.4920	-2.78
85	4	MED	Pleural effusion with CC.....	1.1196	1.1509	1.1643	2.80
86	4	MED	Pleural effusion w/o CC.....	.9761	.6961	.6834	-1.80
87	4	MED	Pulmonary edema and respiratory failure.....	1.8076	1.3895	1.3851	-1.83
88	4	MED	Chronic obstructive pulmonary disease.....	1.0768	.9973	.9942	-.01
89	4	MED	Simple pneumonia and pleurisy age > 17 with CC.....	1.1657	1.1878	1.1658	-.66
90	4	MED	Simple pneumonia and pleurisy age > 17 w/o CC.....	.8842	.7538	.7282	-2.64
91	4	MED	Simple pneumonia and pleurisy age 0-17.....	.7914	.8141	.7846	1.77
92	4	MED	Interstitial lung disease with CC.....	1.1115	1.2131	1.1997	-.18
93	4	MED	Interstitial lung disease w/o CC.....	.8641	.7598	.8028	-3.80
94	4	MED	Pneumothorax with CC.....	1.3044	1.2763	1.2472	2.42
95	4	MED	Pneumothorax w/o CC.....	.8796	.6533	.6108	-2.21
96	4	MED	Bronchitis and asthma age > 17 with CC.....	.8446	.9568	.9457	-.93
97	4	MED	Bronchitis and asthma age > 17 w/o CC.....	.7091	.6561	.6450	-4.02
98	4	MED	Bronchitis and asthma age 0-17.....	.7201	.6135	.6262	8.01
99	4	MED	Respiratory signs and symptoms with CC.....	.8072	.8361	.7962	-4.26
100	4	MED	Respiratory signs and symptoms w/o CC.....	.6253	.5090	.4983	1.32
101	4	MED	Other respiratory system diagnoses with CC.....	.8460	.9181	.9232	-1.05
102	4	MED	Other respiratory system diagnoses w/o CC.....	.6841	.5400	.5272	2.92
103	5	SURG	Heart transplant.....	NV	12.9086	14.0323	-10.52
104	5	SURG	Cardiac valve procedures with cardiac cath.....	7.3151	8.0641	8.2575	-6.12
105	5	SURG	Cardiac valve procedures w/o cardiac cath.....	6.3388	6.0750	6.1581	-5.34
106	5	SURG	Coronary bypass with cardiac cath.....	5.3324	5.4227	5.4470	3.88
107	5	SURG	Coronary bypass w/o cardiac cath.....	4.6608	4.7899	4.9616	-14.65
108	5	SURG	Other cardiothoracic procedures.....	4.7803	5.9649	5.9600	-1.47

109		No longer valid.....	4.3579	NV	4.2703	NV	4.0823	NV	4.40
110	5	Major cardiovascular procedures with CC.....	3.3118		2.3980		2.2979		-4.17
111	5	Major cardiovascular procedures w/o CC.....	2.4549		2.0163		1.9874		-1.43
112	5	Percutaneous cardiovascular procedures.....	2.2055		2.6925		2.7789		3.21
113	5	Amputation for circ system disorders except upper limb and toe.....	2.5345		1.5827		1.5957		2.96
114	5	Upper limb and toe amputation for circ system disorders.....	1.8918		3.7705		3.6092		-1.91
115	5	Perm cardiac pacemaker implant with AMI, heart failure or shock.....	4.1727		2.5190		2.4604		-1.48
116	5	Perm cardiac pacemaker implant w/o AMI, heart failure or shock.....	2.9868		1.3520		1.2264		-3.76
117	5	Cardiac pacemaker revision except device replacement.....	1.2989		1.7375		1.5858		-6.48
118	5	Cardiac pacemaker device replacement.....	1.9224		.8169		.9650		2.89
119	5	Vein ligation and stripping.....	.9164		2.5143		1.9906		-4.00
120	5	Other circulatory system O.R. procedures.....	2.2577		1.6210		1.6114		-59
121	5	Circulatory disorders with AMI and C.V. comp, disch alive.....	1.7687		1.1152		1.1532		-1.16
122	5	Circulatory disorders with AMI w/o C.V. comp, disch alive.....	1.3267		1.3704		1.4090		1.22
123	5	Circulatory disorders with AMI, expired.....	1.3522		1.1816		1.2029		0.47
124	5	Circulatory disorders except AMI, with card cath and complex diag.....	1.2551						
125	5	Circulatory disorders except AMI, w card cath w/o complex diag.....	.7265		.7015		.7587		2.71
126	5	Acute and subacute endocarditis.....	2.9836		2.9543		2.8464		-1.42
127	5	Heart failure and shock.....	1.0098		1.0040		1.0150		.79
128	5	Deep vein thrombophlebitis.....	.8456		.8061		.7906		-42
129	5	Cardiac arrest, unexplained.....	1.7199		1.3242		1.2551		2.23
130	5	Peripheral vascular disorders with CC.....	.8251		.8969		.9106		-13
131	5	Peripheral vascular disorders w/o CC.....	.6705		.5841		.5861		-36
132	5	Atherosclerosis with CC.....	.8037		.7252		.7591		3.82
133	5	Atherosclerosis w/o CC.....	7049		.5205		.5342		-56
134	5	Hypertension.....	.6363		.5992		.5663		-14
135	5	Cardiac congenital and valvular disorders age > 17 with CC.....	.8937		.8623		.8625		-1.65
136	5	Cardiac congenital and valvular disorders age > 17 w/o CC.....	.7525		.5507		.5266		-3.09
137	5	Cardiac congenital and valvular disorders age 0-17.....	.6315		.6239		.6239		2.76
138	5	Cardiac arrhythmia and conduction disorders with CC.....	.8136		.8331		.8211		-1.23
139	5	Cardiac arrhythmia and conduction disorders w/o CC.....	.6514		.5325		.5149		-2.51

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993—Continued

DRG	MDC	Type	Title	Weight			Percent change 1992-93
				1987	1991	1992	
140	5	MED	Angina pectoris .....	.6894	.6296	.6226	.6219
141	5	MED	Syncope and collapse with CC .....	.6187	.6899	.6950	.6998
142	5	MED	Syncope and collapse w/o CC .....	.5335	.5012	.5006	.5048
143	5	MED	Chest pain .....	.5893	.5140	.5118	.5164
144	5	MED	Other circulatory system diagnoses with CC	1.1160	1.0849	1.0888	1.0650
145	5	MED	Other circulatory system diagnoses w/o CC .....	.8475	.5933	.6454	.6240
146	6	SURG	Rectal resection with CC	3.0751	2.5864	2.5777	2.5394
147	6	SURG	Rectal resection w/o CC	2.2735	1.6406	1.6301	1.5192
148	6	SURG	Major small and large bowel procedures with CC	2.9401	3.1996	3.1804	3.1353
149	6	SURG	Major small and large bowel procedures w/o CC	2.1069	1.6044	1.5443	1.4948
150	6	SURG	Peritoneal adhesiolysis with CC	2.3426	2.5312	2.5069	2.5484
151	6	SURG	Peritoneal adhesiolysis w/o CC	1.5900	1.2777	1.2042	1.1895
152	6	SURG	Minor small and large bowel procedures with CC	1.4059	1.4769	1.7255	1.7736
153	6	SURG	Minor small and large bowel procedures w/o CC	1.0992	1.0170	1.0534	1.0426
154	6	SURG	Stomach, esophageal and duodenal procedures age > 17 with CC	2.6876	3.6320	4.1746	4.0491
155	6	SURG	Stomach, esophageal and duodenal procedures age > 17 w/o CC	1.7902	1.4768	1.5472	1.4617
156	6	SURG	Stomach, esophageal and duodenal procedures age 0-17 .....	.8382	.8281	.8281	.8510
157	6	SURG	Anal and stomal procedures with CC .....	.7302	.9248	.9372	.9575
158	6	SURG	Anal and stomal procedures w/o CC .....	.5511	.4877	.4909	.4975
159	6	SURG	Hernia procedures except inguinal and femoral age > 17 with CC .....	.9997	1.0797	1.0701	1.0747
160	6	SURG	Hernia procedures except inguinal and femoral age > 17 w/o CC .....	.7457	.6166	.6156	.6168
							.19

161	6	SURG	Inguinal and femoral hernia procedures age > 17 with CC.....	.6536	.7238	.7382	.7820	5.93
162	6	SURG	Inguinal and femoral hernia procedures age > 17 w/o CC.....	.5261	.4428	.4476	.4651	3.91
163	6	SURG	Hernia procedures age 0-17 .....	.9647	.6397	.6612	.4843	-26.75
164	6	SURG	Appendectomy with complicated principal diag with CC.....	2.0646	2.2699	2.1733	2.1607	-58
165	6	SURG	Appendectomy with complicated principal diag w/o CC.....	1.4375	1.2944	1.2562	1.2080	-3.84
166	6	SURG	Appendectomy w/o complicated principal diag with CC.....	1.3604	1.3818	1.2931	1.3251	2.47
167	6	SURG	Appendectomy w/o complicated principal dial w/o CC.....	.8872	.7745	.7597	.7495	-1.34
168	6	SURG	Mouth procedures with CC.....	.9182	.9806	1.0601	.9902	-6.59
169	6	SURG	Mouth procedures w/o CC.....	.6580	.5558	.5406	.5788	7.07
170	6	SURG	Other digestive system O.R. procedures with CC.....	2.7611	2.7171	2.7582	2.7310	-99
171	6	SURG	Other digestive system O.R. procedures w/o CC.....	2.3295	1.1583	1.1303	1.0898	-3.58
172	6	MED	Digestive malignancy with CC.....	1.0748	1.2445	1.2549	1.2990	3.51
173	6	MED	Digestive malignancy w/o CC.....	.9602	.6358	.6218	.6346	2.06
174	6	MED	G.I. hemorrhage with CC.....	.9073	.9537	.9735	.9794	.61
175	6	MED	G.I. hemorrhage w/o CC.....	.7067	.5756	.5723	.5506	-3.79
176	6	MED	Complicated peptic ulcer.....	.9316	.9830	1.0235	1.0331	.94
177	6	MED	Uncomplicated peptic ulcer with CC.....	.6615	.7803	.7840	.7931	1.16
178	6	MED	Uncomplicated peptic ulcer w/o CC.....	.5554	.5564	.5656	.5720	1.13
179	6	MED	Inflammatory bowel disease.....	.9875	1.0895	1.1141	1.1044	-87
180	6	MED	G.I. obstruction with CC.....	.7583	.9165	.9216	.9279	.68
181	6	MED	G.I. obstruction w/o CC.....	.5827	.5130	.4988	.5007	.38
182	6	MED	Esophagitis, gastroent and misc digest disorders age > 17 with CC.....	.6032	.7497	.7599	.7721	1.61
183	6	MED	Esophagitis, gastroent and misc digest disorders age > 17 w/o CC.....	.5104	.5200	.5198	.5296	1.89
184	6	MED	Esophagitis, gastroent and misc digest disorders age 0-17 .....	.4828	.6801	.5125	.5625	9.76
185	3	MED	Dental and oral dis except extractions and restorations, age > 17.....	.7147	.7548	.7766	.7854	1.13
186	3	MED	Dental and oral dis except extractions and restorations, age 0-17 ..	.4112	.4062	.4062	.4174	2.76
187	3	MED	Dental extractions and restorations .....	.4209	.4814	.5094	.5650	10.91
188	6	MED	Other digestive system diagnoses age > 17 with CC.....	.7171	.9632	.9846	.9971	1.27
189	6	MED	Other digestive system diagnoses age > 17 w/o CC.....	.5260	.4802	.4697	.4804	2.28

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993—Continued

DRG	MDC	Type	Title	Weight			Percent change 1992-93
				1987	1991	1992	
190	6	MED	Other digestive system diagnoses age 0-17.....	.9178	.6312	.7555	-10.05
191	7	SURG	Pancreas, liver and shunt procedures with CC.....	4.4603	4.6941	4.4412	.54
192	7	SURG	Pancreas, liver and shunt procedures w/o CC.....	4.0437	1.9662	1.7379	-1.89
193	7	SURG	Biliary tract proc w CC except only cholectom w or w/o C.D.E.....	2.8115	3.0102	3.0275	.33
194	7	SURG	Biliary tract proc w/o CC except only cholectom w or w/o C.D.E.....	2.1204	1.7387	1.6189	.89
195	7	SURG	Cholectomy with C.D.E. with CC.....	2.2724	2.2175	2.2099	2.92
196	7	SURG	Cholectomy with C.D.E. w/o CC.....	1.5974	1.4183	1.3547	3.63
197	7	SURG	Cholectomy w/o C.D.E. with CC.....	1.7055	1.7336	1.6872	.26
198	7	SURG	Cholectomy w/o C.D.E. w/o CC.....	1.1399	.9445	.9076	-3.51
199	7	SURG	Hepatobiliary diagnostic procedure for malignancy.....	2.3379	2.3168	2.4049	-2.80
200	7	SURG	Hepatobiliary diagnostic procedure for non-malignancy.....	2.6281	2.8940	2.7960	-2.70
201	7	SURG	Other hepatobiliary or pancreas O.R. procedures.....	2.7125	2.4210	2.3034	9.49
202	7	MED	Cirrhosis and alcoholic hepatitis.....	1.1665	1.2019	1.2231	6.25
203	7	MED	Malignancy of hepatobiliary system or pancreas.....	1.0338	1.1301	1.1784	3.17
204	7	MED	Disorders of pancreas except malignancy.....	.9698	1.0617	1.0870	2.65
205	7	MED	Disorders of liver except malign, cirr, alc hepa with CC.....	1.0718	1.1985	1.2402	-1.23
206	7	MED	Disorders of liver except malign, cirr, alc hepa w/o CC.....	.7735	.6210	.6029	1.39
207	7	MED	Disorders of the biliary tract with CC.....	.7775	.9569	.9732	.84
208	7	MED	Disorders of the biliary tract w/o CC.....	.5793	.5599	.5532	.58
*209	8	SURG	Major joint and limb reattachment procedures-lower extremity.....	2.3925	2.3689	2.3795	-46
210	8	SURG	Hip and femur procedures except major joint age > 17 with CC.....	2.0317	1.9939	1.9386	-1.59
211	8	SURG	Hip and femur procedures except major joint age > 17 w/o CC.....	1.7866	1.4302	1.3747	-3.20
212	8	SURG	Hip and femur procedures except major joint age 0-17.....	1.6608	.9981	.9139	13.20
213	8	SURG	Amputation for musculoskeletal system and conn tissue disorders.....	1.9750	1.7562	1.7471	1.23
214	8	SURG	Back and neck procedures with CC.....	1.8749	1.9298	1.8748	-33
215	8	SURG	Back and neck procedures w/o CC.....	1.4275	1.1550	1.1156	-2.25

216	8	SURG	Biopsies of musculoskeletal system and connective tissue.....	1.5565	1.8502	2.0321	2.0429	.53
217	8	SURG	WND debrid and skin graft except hand, for musculoskelet and conn tiss dis.	2.3097	3.1173	3.1641	3.0601	-3.29
218	8	SURG	Lower extrem and humer proc except hip, foot, femur age > 17 with CC.	1.3797	1.4748	1.4112	1.4186	.52
219	8	SURG	Lower extrem and humer proc except hip, foot, femur age > 17 w/o CC.	1.0436	.9194	.8977	.8956	-.23
220	8	SURG	Lower extrem and humer proc except hip, foot, femur age 0-17.....	.9242	.9130	.9130	.9382	2.76
221	8	SURG	Knee procedures with CC.....	1.0141	1.5919	1.8350	1.7828	-2.84
222	8	SURG	Knee procedures w/o CC.....	.7262	.9134	.9721	.9544	-1.82
223	8	SURG	Major shoulder/elbow proc, or other upper extremity proc with CC..	1.2263	.8260	.8044	.8087	.53
224	8	SURG	Shoulder, elbow or forearm proc, exc major joint proc w/o CC.....	.6894	.6224	.6306	.6538	3.68
225	8	SURG	Foot procedures.....	.6552	.7421	.7825	.8212	4.95
226	8	SURG	Soft tissue procedures with CC.....	.8783	1.3371	1.3613	1.3241	-2.73
227	8	SURG	Soft tissue procedures w/o CC.....	.6673	.6604	.6791	.6767	-.35
228	8	SURG	Major thumb or joint proc, or other hand or wrist proc with CC.....	.8180	.8148	.8015	.7961	-.67
229	8	SURG	Hand or wrist proc except major joint proc w/o CC.....	.4995	.5358	.5403	.5539	2.52
230	8	SURG	Local excision and removal of int fix devices of hip and femur.....	1.0156	.8508	.9278	.9179	-1.07
231	8	SURG	Local excision and removal of int fix devices except hip and femur..	.7381	.9306	1.0817	1.1044	2.10
232	8	SURG	Arthroscopy.....	.6723	.9981	1.2448	1.1792	-5.27
233	8	SURG	Other musculoskelet sys and conn tiss O.R. proc with CC.....	1.3898	1.8416	1.9873	1.8579	-6.51
234	8	SURG	Other musculoskelet sys and conn tiss O.R. proc w/o CC.....	.9517	.8322	1.0365	.8957	-13.58
235	8	MED	Fractures of femur.....	1.4136	1.1383	1.0974	1.0209	-6.97
236	8	MED	Fractures of hip and pelvis.....	1.0712	.8516	.8428	.8128	-3.56
237	8	MED	Sprains, strains and dislocations of hip, pelvis and thigh.....	.6049	.5424	.5583	.5496	-1.56
238	8	MED	Osteomyelitis.....	1.6471	1.5682	1.5884	1.5435	-2.83
239	8	MED	Pathological fractures and musculoskeletal and conn tiss malig- nancy.	.9268	1.0035	1.0269	1.0415	1.42
240	8	MED	Connective tissue disorders with CC.....	.9047	1.1197	1.1486	1.1468	-.16
241	8	MED	Connective tissue disorders w/o CC.....	.7463	.5852	.5704	.5782	1.37
242	8	MED	Septic arthritis.....	1.4562	1.2566	1.2558	1.1864	-5.53
243	8	MED	Medical back problems.....	.6840	.6580	.6672	.6834	2.43

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993—Continued

DRG	MDC	Type	Title	Weight			Percent change 1992-93
				1987	1991	1992	
244	8	MED	Bone diseases and specific arthropathies with CC	.6742	.7228	.7665	-4.07
245	8	MED	Bone diseases and specific arthropathies w/o CC	.6400	.5008	.5434	-7.20
246	8	MED	Non-specific arthropathies	.5935	.5736	.5872	-2.83
247	8	MED	Signs and symptoms of musculoskeletal system and conn tissue	.5793	.5332	.5445	4.35
248	8	MED	Tendonitis, myositis and bursitis	.5892	.6342	.6673	1.15
249	8	MED	Aftercare, musculoskeletal system and connective tissue	.7875	.6320	.7156	-2.67
250	8	MED	FX, sprn, strn and disl of forearm, hand, foot age > 17 with CC	.5158	.6757	.7021	0.37
251	8	MED	FX, sprn, strn and disl of forearm, hand, foot age > 17 w/o CC	.4003	.4315	.4291	2.42
252	8	MED	FX, sprn, strn and disl of forearm, hand, foot age 0-17	.3496	.3454	.3454	2.75
253	8	MED	FX, sprn, strn and disl of uparm, lowleg ex foot age > 17 with CC	.6321	.7871	.7885	-1.41
254	8	MED	FX, sprn, strn and disl of uparm, lowleg ex foot age > 17 w/o CC	.4929	.4303	.4238	-0.17
255	8	MED	FX, sprn, strn, and disl of uparm, lowleg ex foot age 0-17	.4638	.4582	.4582	2.77
256	8	MED	Other musculoskeletal system and connective tissue diagnoses	.6991	.6267	.6409	1.50
257	9	SURG	Total mastectomy for malignancy with CC	1.0630	.9219	.9024	-0.82
258	9	SURG	Total mastectomy for malignancy w/o CC	.9696	.7178	.7057	-0.78
259	9	SURG	Subtotal mastectomy for malignancy with CC	.8605	.9581	.9073	-3.30
260	9	SURG	Subtotal mastectomy for malignancy w/o CC	.6659	.5764	.5720	-107
261	9	SURG	Breast proc for non-malignancy except biopsy and local excision	.6104	.6509	.6749	6.43
262	9	SURG	Breast biopsy and local excision for non-malignancy	.4252	.4537	.4944	8.11
263	9	SURG	Skin graft and/or debrid for skin ulcer or cellulitis with CC	2.4173	2.7750	2.6866	-5.45
264	9	SURG	Skin graft and/or debrid for skin ulcer or cellulitis w/o CC	2.1798	1.3569	1.2982	-2.46
265	9	SURG	Skin graft and/or debrid except for skin ulcer or cellulitis w CC	1.3967	1.3538	1.3860	0.57
266	9	SURG	Skin graft and/or debrid except for skin ulcer or cellulitis w/o	.7313	.6682	.6814	2.41
267	9	SURG	Perianal and pilonidal procedures	.6360	.6003	.5922	5.45

268	9	SURG	Skin, subcutaneous tissue and breast plastic procedures.....	.5657	.7210	.7194	.7519	4.52
269	9	SURG	Other skin, subcut tiss and breast proc with CC.....	1.1334	1.7063	1.6600	1.6956	2.14
270	9	SURG	Other skin, subcut tiss and breast proc w/o CC.....	.7622	.6709	.6551	.6343	-3.18
271	9	MED	Skin ulcers.....	1.2612	1.2568	1.2480	1.1970	-4.09
272	9	MED	Major skin disorders with CC.....	.8524	1.0177	1.0789	1.0477	-2.89
273	9	MED	Major skin disorders w/o CC.....	.7971	.6664	.6575	.6583	0.12
274	9	MED	Malignant breast disorders with CC.....	1.0367	1.1101	1.1312	1.1572	2.30
275	9	MED	Malignant breast disorders w/o CC.....	.9880	.5443	.5870	.5957	1.48
276	9	MED	Non-malignant breast disorders.....	.5677	.5710	.5731	.6085	6.18
277	9	MED	Cellulitis age 17 > with CC.....	.8861	.9269	.9190	.9036	-1.76
278	9	MED	Cellulitis age 17 > w/o CC.....	.7582	.6278	.6129	.5941	-3.07
279	9	MED	Cellulitis age 0-17.....	.4739	.7278	.7278	.7479	2.76
280	9	MED	Trauma to the skin, subcut tiss and breast age 17 > with CC.....	.5414	.6538	.6639	.6807	2.53
281	9	MED	Trauma to the skin subcut tiss and breast age > 17 w/o CC.....	.4467	.4169	.4167	.4270	2.47
282	9	MED	Trauma to the skin subcut tiss and breast age 0-17.....	.3424	.3381	.3383	.3476	2.75
283	9	MED	Minor skin disorders with CC.....	.6365	.7401	.7350	.7558	2.83
284	9	MED	Minor skin disorders w/o CC.....	.5170	.4544	.4410	.4450	.91
285	10	SURG	Amputat of lower limb for endoc, nutrit and metabol disorders.....	3.2719	2.7822	2.7210	2.7519	1.14
286	10	SURG	Adrenal and pituitary procedures.....	2.6727	2.4946	2.4320	2.3944	-1.55
287	10	SURG	Skin grafts and wound debrid for endoc, nutrit and metabol disorders.....	2.3776	2.2311	2.2533	2.1744	-3.50
288	10	SURG	O.R. procedures for obesity.....	2.1128	1.9691	1.8810	2.0378	8.34
289	10	SURG	Parathyroid procedures.....	1.3304	.9954	1.0079	1.0252	1.72
290	10	SURG	Thyroid procedures.....	.8561	.7394	.7491	.7448	-57
291	10	SURG	Thyroglossal procedures.....	.6072	.4882	.4416	.4896	10.87
292	10	SURG	Other endocrine, nutrit and metab O.R. proc with CC.....	2.3129	2.8203	2.8387	2.8428	.14
293	10	SURG	Other endocrine, nutrit and metab O.R. proc w/o CC.....	1.7960	1.0686	1.1528	1.1284	-2.12
294	10	MED	Diabetes age > 35.....	.7454	.7533	.7516	.7491	-.33
295	10	MED	Diabetes age 0-35.....	.7886	.7433	.7400	.7721	4.34
296	10	MED	Nutritional and misc metabolic disorders age > 17 with CC.....	.8271	.9387	.9378	.9410	.34
297	10	MED	Nutritional and misc metabolic disorders age > 17 w/o CC.....	.6980	.5361	.5303	.5271	-.60
298	10	MED	Nutritional and misc metabolic disorders age 0-17.....	.7203	.5694	.5396	.4777	-11.47

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993—Continued

DRG	MDC	Type	Title	Weight			Percent change 1992-93
				1987	1991	1992	
299	10	MED	Inborn errors of metabolism.....	.8041	.8009	.8598	-2.40
300	10	MED	Endocrine disorders with CC.....	.9348	1.1216	1.1191	.54
301	10	MED	Endocrine disorders w/o CC.....	.6882	.6187	.5923	-1.89
302	11	SURG	Kidney transplant.....	4.6267	3.9581	3.8891	-.02
303	11	SURG	Kidney, ureter and major bladder procedures for neoplasm.....	2.7606	2.6416	2.6645	-.42
304	11	SURG	Kidney, ureter and major bladder proc for non-neopl with CC.....	2.0322	2.4192	2.3986	.49
305	11	SURG	Kidney, ureter and major bladder proc for non-neopl w/o CC.....	1.4893	1.2168	1.1821	-2.31
306	11	SURG	Prostatectomy with CC.....	1.2593	1.3240	1.2922	-1.38
307	11	SURG	Prostatectomy w/o CC.....	.9585	.7334	.7100	-2.97
308	11	SURG	Minor bladder procedures with CC.....	1.1487	1.4736	1.4341	-.18
309	11	SURG	Minor bladder procedures w/o CC.....	.8644	.7815	.7375	-1.19
310	11	SURG	Transurethral procedures with CC.....	.7265	.8741	.8792	1.00
311	11	SURG	Transurethral procedures w/o CC.....	.5564	.5178	.5182	-.56
312	11	SURG	Urethral procedures, age > 17 with CC.....	.7307	.7898	.8174	-1.13
313	11	SURG	Urethral procedures, age > 17 w/o CC.....	.5804	.4769	.4607	.35
314	11	SURG	Urethral procedures, age 0-17.....	.4323	.4271	.4271	2.76
315	11	SURG	Other kidney and urinary tract O.R. procedures.....	2.7736	2.1922	2.1027	-3.16
316	11	MED	Renal failure.....	1.3210	1.2684	1.2814	.64
317	11	MED	Admit for renal dialysis.....	.4907	.3499	.4825	5.18
318	11	MED	Kidney and urinary tract neoplasms with CC.....	.9216	1.0885	1.0908	3.08
319	11	MED	Kidney and urinary tract neoplasms w/o CC.....	.7415	.5586	.5455	-7.08
320	11	MED	Kidney and urinary tract infections age > 17 with CC.....	.8626	1.0055	1.0002	-1.95
321	11	MED	Kidney and urinary tract infections age > 17 w/o CC.....	.6750	.6507	.6346	-1.48
322	11	MED	Kidney and urinary tract infections age 0-17.....	.6996	.6387	.6334	.87
323	11	MED	Urinary stones with CC and/or ESW lithotripsy.....	.5862	.7510	.7422	-.55
324	11	MED	Urinary stone w/o CC.....	.4096	.3932	.3898	-1.03

325	11	MED	Kidney and urinary tract signs and symptoms age > 17 with CC...	.6503	.6666	.6673	.6551	-1.83
326	11	MED	Kidney and urinary tract signs and symptoms age > 17 w/o CC...	.5156	.4286	.4219	.4152	-1.59
327	11	MED	Kidney and urinary tract signs and symptoms age 0-17	.5511	.5444	.5444	.7038	29.28
328	11	MED	Urethral stricture age > 17 with CC	.5939	.6346	.6143	.6363	3.58
329	11	MED	Urethral stricture age > 17 w/o CC	.4870	.4168	.3978	.4113	3.39
330	11	MED	Urethral stricture age 0-17	.2788	.2754	.2754	.2830	2.76
331	11	MED	Other kidney and urinary tract diagnoses age > 17 with CC	.8329	.9493	.9566	.9765	2.08
332	11	MED	Other kidney and urinary tract diagnoses age > 17 w/o CC	.6725	.5447	.5340	.5347	.13
333	11	MED	Other kidney and urinary tract diagnoses age 0-17	.7912	1.0415	.9094	.9590	5.45
334	12	SURG	Major male pelvic procedures with CC	1.8035	1.7911	1.7509	1.7728	1.25
335	12	SURG	Major male pelvic procedures w/o CC	1.4643	1.3375	1.3574	1.3597	.17
336	12	SURG	Transurethral prostatectomy with CC	.9869	.9326	.9005	.8704	-3.34
337	12	SURG	Transurethral prostatectomy w/o CC	.7788	.6329	.6163	.6066	-1.57
338	12	SURG	Testes procedures, for malignancy	.8907	.7662	.7776	.9386	20.70
339	12	SURG	Testes procedures, non-malignancy age > 17	.5766	.5880	.6382	.7572	18.65
340	12	SURG	Testes procedures, non-malignancy age 0-17	.4335	.4283	.4283	.4401	2.76
341	12	SURG	Penis procedures	.9970	.9850	.9615	.9681	.69
342	12	SURG	Circumcision age > 17	.4265	.4971	.5955	.5766	-3.17
343	12	SURG	Circumcision age 0-17	.3788	.3742	.3742	.3845	2.75
344	12	SURG	Other male reproductive system O.R. procedures for malignancy	1.1214	1.0811	1.0492	1.0568	.72
345	12	SURG	Other male reproductive system O.R. proc except for malignancy	.8173	.7450	.7263	.7521	3.55
346	12	MED	Malignancy, male reproductive system with CC	.8568	.9561	.9609	.9906	3.09
347	12	MED	Malignancy, male reproductive system w/o CC	.6441	.4852	.5016	.5120	2.07
348	12	MED	Benign prostatic hypertrophy with CC	.6257	.6835	.6709	.6815	1.58
349	12	MED	Benign prostatic hypertrophy w/o CC	.4853	.3847	.4049	.3952	-2.40
350	12	MED	Inflammation of the male reproductive system	.6270	.6657	.6731	.6707	-36
351	12	MED	Sterilization, male	.3333	.3293	.3293	.3384	2.76
352	12	MED	Other male reproductive system diagnoses	.5354	.5158	.5838	.5801	-63
353	13	SURG	Pelvic evisceration, radical hysterectomy and radical vulvectomy	2.3887	2.1148	2.0590	1.9031	-7.57
354	13	SURG	Uterine, adnexa proc for non-ovarian/adnexal malignancy with CC	1.3563	1.3937	1.3909	1.3686	-1.60
355	13	SURG	Uterine, adnexa proc for non-ovarian/adnexal malignancy w/o CC	1.0359	.8676	.8562	.8493	-81
356	13	SURG	Female reproductive system reconstructive procedures	.8470	.7139	.7076	.7030	-65

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993—Continued

DRG	MDC	Type	Title	Weight			Percent change 1992-93
				1987	1991	1992	
357	13	SURG	Uterine and adnexa proc for ovarian or adnexal malign.	2.1103	2.2286	2.2167	2.3097
358	13	SURG	Uterine and adnexa proc for non-malignancy with CC.	1.1152	1.1515	1.1104	1.1066
359	13	SURG	Uterine and adnexa proc for non-malignancy w/o CC.	.9462	.7887	.7823	.7723
360	13	SURG	Vagina, cervix and vulva procedures.	.6338	.7643	.7757	.8024
361	13	SURG	Laparoscopy and incisional tubal interruption.	.6594	.8125	.8512	.9767
362	13	SURG	Endoscopic tubal interruption.	.3510	.4921	.4921	.5057
363	13	SURG	D&C, conization and radio-implant, for malignancy.	.6156	.6421	.6440	.6251
364	13	SURG	D&C, conization except for malignancy.	.3921	.4876	.5295	.5659
365	13	SURG	Other female reproductive system O.R. procedures.	1.9085	1.7521	1.6878	1.7093
366	13	MED	Malignancy, female reproductive system with CC.	.8624	1.1937	1.1681	1.2158
367	13	MED	Malignancy, female reproductive system w/o CC.	.5353	.4791	.4953	.4808
368	13	MED	Infections, female reproductive system.	.7610	.8639	.9233	.8820
369	13	MED	Menstrual and other female reproductive system disorders.	.5496	.5198	.5274	.5321
370	14	SURG	Cesarean section with CC.	1.1063	.9284	1.0237	.8916
371	14	SURG	Cesarean section w/o CC.	.7669	.6277	.6456	.6461
372	14	MED	Vaginal delivery with complicating diagnoses.	.5942	.4541	.5235	.4619
373	14	MED	Vaginal delivery w/o complicating diagnoses.	.3338	.2963	.3169	.3182
374	14	SURG	Vaginal delivery with sterilization and/or D and C.	.5754	.5204	.5045	.6297
375	14	SURG	Vaginal delivery with O.R. proc except steril and/or D and C.	.6817	.6735	.6735	.6921
376	14	MED	Postpartum and post abortion diagnoses w/o O.R. procedure.	.4539	.3646	.3764	.3247
377	14	SURG	Postpartum and post abortion diagnoses with O.R. procedure.	.7698	.6757	1.0278	.8392
378	14	MED	Ectopic pregnancy.	.7357	.6686	.7532	.7694
379	14	MED	Threatened abortion.	.2409	.2651	.2892	.2743
380	14	MED	Abortion w/o D and C.	.3792	.2943	.2720	.3430
381	14	MED	Abortion with D and C, aspiration curettage or hysterotomy.	.3725	.3727	.3827	.4326
382	14	MED	False labor.	.1136	.1101	.1251	.1486

383	14	MED	Other antepartum diagnoses with medical complications .....	.4452	.3854	.3934	.3947	.33
384	14	MED	Other antepartum diagnoses w/o medical complications .....	.4586	.2833	.3072	.2701	-10.77
385	15	MED	Neonates, died or transferred to another acute care facility .....	.6811	1.2084	1.2084	1.2418	2.76
386	15	MED	Extreme immaturity or respiratory distress syndrome, neonate	3.6480	3.6039	3.6039	3.7035	2.76
387	15	MED	Prematurity with major problems	1.8267	1.8046	1.8046	1.8545	2.77
388	15	MED	Prematurity w/o major problems	1.1571	1.1431	1.1431	1.1747	2.76
389	15	MED	Full term neonate with major problems .....	.5425	1.4266	1.3846	1.4229	2.77
390	15	MED	Neonate with other significant problems .....	.3486	1.0001	.8422	1.1340	34.65
391	15	MED	Normal newborn .....	.2218	.2191	.2191	.2252	2.78
392	16	SURG	Splenectomy age > 17	3.2488	3.2611	3.2912	3.1287	-4.94
393	16	SURG	Splenectomy age 0-17	1.5206	1.5022	1.5022	1.5437	2.76
394	16	SURG	Other O.R. procedures of the blood and blood forming organs	1.0889	1.5388	1.5719	1.5966	1.57
395	16	MED	Red blood cell disorders age > 17 .....	.7153	.7471	.7679	.7881	2.63
396	16	MED	Red blood cell disorders age 0-17 .....	.2952	.3615	.5246	.6802	29.66
397	16	MED	Coagulation disorders .....	.9969	1.1577	1.2128	1.1905	-1.84
398	16	MED	Reticuloendothelial and immunity disorders with CC .....	.9752	1.1795	1.2080	1.2091	.09
399	16	MED	Reticuloendothelial and immunity disorders w/o CC .....	.7247	.6576	.6661	.6735	1.11
400	17	SURG	Lymphoma and leukemia with major O.R. procedure	3.1139	2.7073	2.5985	2.5572	-1.59
401	17	SURG	Lymphoma and nonacute leukemia with other O.R. proc with CC	1.9327	2.2071	2.2510	2.3497	4.38
402	17	SURG	Lymphoma and nonacute leukemia with other O.R. proc w/o CC	1.0514	.8877	.8701	.8536	-1.90
403	17	MED	Lymphoma and nonacute leukemia with CC	1.3493	1.6019	1.6125	1.6827	4.35
404	17	MED	Lymphoma and nonacute leukemia w/o CC .....	.9101	.7474	.7282	.7428	2.00
405	17	MED	Acute leukemia w/o major O.R. procedure age 0-17	1.0407	1.0281	1.0281	1.0565	2.76
406	17	SURG	Myeloprolif disorder or poorly diff neopl with maj O.R. proc with CC...	2.5302	2.6994	2.6566	2.7669	4.15
407	17	SURG	Myeloprolif disorder or poorly diff neopl with maj O.R. proc w/o CC.	1.7124	1.2438	1.1519	1.1999	4.17
408	17	SURG	Myeloprolif disorder or poorly diff neopl with other O.R. proc	1.0500	1.0511	1.1046	1.3279	20.22
409	17	MED	Radiotherapy .....	.9855	1.0213	1.0094	.9886	-2.06
*410	17	MED	Chemotherapy without acute leukemia as secondary diagnosis .....	.4284	.5123	.5540	.6095	10.02
411	17	MED	History of malignancy w/o endoscopy .....	.5907	.4320	.4569	.4256	-6.85
412	17	MED	History of malignancy with endoscopy .....	.3388	.4072	.4216	.4257	.97
413	17	MED	Other myeloprolif dis or poorly diff neopl diag with CC	1.0455	1.3073	1.3299	1.3335	.27

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993—Continued

DRG	MDC	Type	Title	Weight			Percent change 1992-93
				1987	1991	1992	
414	17	MED	Other myeloprolif dis or poorly diff neopl diag w/o CC	.8983	.7062	.7231	.6857
415	18	SURG	O.R. procedure for infectious and parasitic diseases	3.3287	3.5957	3.6042	3.5162
416	18	MED	Septicemia age > 17	1.6182	1.5320	1.5308	1.5222
417	18	MED	Septicemia age 0-17	1.1530	1.0768	1.0315	.8974
418	18	MED	Postoperative and post-traumatic infections	1.0022	.9816	.9585	.9500
419	18	MED	Fever of unknown origin age > 17 with CC	.9305	.9515	.9548	.9679
420	18	MED	Fever of unknown origin age > 17 without CC	.8316	.6612	.6484	.6510
421	18	MED	Viral illness age > 17	.5672	.6517	.6667	.6882
422	18	MED	Viral illness and fever of unknown origin age 0-17	.6583	.7604	.5916	.7629
423	18	MED	Other infectious and parasitic diseases diagnoses	1.3205	1.5928	1.6240	1.5976
424	19	SURG	O.R. procedure with principal diagnoses of mental illness	2.2113	2.3652	2.3695	2.4058
425	19	MED	Acute adjust react and disturbances of psychosocial dysfunction	.6090	.6890	.7113	.7045
426	19	MED	Depressive neuroses	.8332	.06290	.6241	.6023
427	19	MED	Neuroses except depressive	.7018	.6428	.6028	.6322
428	19	MED	Disorders of personality and impulse control	.8513	.7065	.7831	.7703
429	19	MED	Organic disturbances and mental retardation	.8419	.9216	.9342	.9460
430	19	MED	Psychoses	1.0760	.9026	.9074	.9040
431	19	MED	Childhood mental disorders	.8493	.6422	.7355	.5980
432	19	MED	Other mental disorder diagnoses	.6968	.7405	.6960	.7113
433	20	MED	Alcohol/drug abuse or dependence, left AMA	.3906	.3829	.3754	.3545
434	20	MED	Alcohol/drug abuse or dependence, detox or other sympt trt with CC	.7096	.7649	.7689	.7494
435	20	MED	ALC/drug abuse or dependence, detox or other sympt trt w/o CC	.7978	.5007	.5141	.4818
436	20	MED	ALC/drug dependence with rehabilitation therapy	1.0166	.9979	1.0782	.9869
437	20	MED	ALC/drug dependence, combined rehab and detox therapy	1.3273	1.1437	1.1775	1.0888
438			No longer valid	NV	NV	NV	NV

439	21	SURG	Skin grafts for injuries.....	1.6505	1.6689	1.5267	1.2126	-20.57
440	21	SURG	Wound debridements for injuries.....	2.0421	2.5374	1.8492	1.8359	-72
441	21	SURG	Hand procedures for injuries.....	.7303	.7189	.6872	.7321	6.53
442	21	SURG	Other O.R. procedures for injuries with CC.....	1.8143	1.8473	1.9377	1.9106	-1.40
443	21	SURG	Other O.R. procedures for injuries w/o CC.....	1.4841	1.1467	.7595	.7518	-1.01
444	21	MED	Traumatic injury age > 17 with CC.....	.7072	.7621	.7566	.7643	1.02
445	21	MED	Traumatic injury age > 17 w/o CC.....	.6014	.4906	.4911	.4649	-5.33
446	21	MED	Traumatic injury age 0-17.....	.4796	.4738	.4738	.4869	2.76
447	21	MED	Allergic reactions age > 17.....	.4470	.4822	.4776	.4919	2.99
448	21	MED	Allergic reactions age 0-17.....	.3470	.3428	.3428	.3523	2.77
449	21	MED	Poisoning and toxic effects of drugs age > 17 with CC.....	.6951	.7904	.7867	.7889	.28
450	21	MED	Poisoning and toxic effects of drugs age > 17 w/o CC.....	.5422	.4485	.4428	.4325	-2.33
451	21	MED	Poisoning and toxic effects of drugs age 0-17.....	.5497	.5126	.5126	.5268	2.77
452	21	MED	Complications of treatment with CC.....	.8079	.9317	.8184	.8550	4.47
453	21	MED	Complications of treatment w/o CC.....	.7468	.4775	.4177	.4175	-0.05
454	21	MED	Other injury, poisoning and toxic eff diag with CC.....	.8099	.9488	.9096	.8873	-2.45
455	21	MED	Other injury, poisoning and toxic eff diag w/o CC.....	.6002	.4282	.4187	.4130	-1.36
456	22	MED	Burns, transferred to another acute care facility.....	1.8155	1.5138	2.0198	1.7285	-14.42
457	22	MED	Extensive burns w/o O.R. procedure.....	3.2280	2.1317	1.6731	2.0147	20.42
458	22	SURG	Nonextensive burns with skin graft.....	3.9450	3.7539	3.9835	3.8787	-2.63
459	22	SURG	Nonextensive burns with wound debridement or other O.R. proc.....	3.2658	2.0711	1.9637	1.8906	-3.72
460	22	MED	Nonextensive burns w/o O.R. procedure.....	1.1592	1.0607	1.0435	1.0032	-3.86
461	23	SURG	O.R. proc with diagnoses of other contact with health services.....	1.3548	.7771	.8268	.8808	6.53
462	23	MED	Rehabilitation.....	2.1404	1.8435	1.8346	1.7805	-2.95
463	23	MED	Signs and symptoms with CC.....	.7949	.7462	.7297	.7277	-27
464	23	MED	Signs and symptoms w/o CC.....	.6952	.4700	.4495	.4567	1.60
465	23	MED	Aftercare with history of malignancy as secondary diagnosis.....	.2881	.3995	.3706	.3531	-4.72
466	23	MED	Aftercare w/o history of malignancy as secondary diagnosis.....	.4152	.5749	.5693	.5328	-6.41
467	23	MED	Other factors influencing health status.....	.7212	.4226	.4303	.4469	3.86
468		SURG	Extensive O.R. procedure unrelated to principal diagnosis.....	2.4516	3.4146	3.4238	3.4195	-13
469			Principal diagnosis invalid as discharge diagnosis.....	NV	NV	NV	NV	NV
470			Ungroupable.....	NV	NV	NV	NV	NV

TABLE 22.—DRG RELATIVE WEIGHTS FROM FISCAL YEARS 1987, 1991, 1992 AND 1993—Continued

DRG	MDC	Type	Title	Weight				Percent change 1992-93
				1987	1991	1992	1993	
471	8	SURG	Bilateral or multiple major joint procs of lower extremity	3.8991	3.9492	3.9623	3.8976	-1.63
472	22	SURG	Extensive burns with O.R. procedure	12.3234	11.7637	13.9563	11.7093	-16.10
473	17	MED	Acute leukemia w/o major O.R. procedure age > 17	2.3275	3.2953	3.3381	3.4402	3.06
474			No longer valid	NV	NV	NV	NV	NV
475	4	MED	Respiratory system diagnosis with ventilator support	NV	3.5492	3.6094	3.5965	-36
476		SURG	Prostatic O.R. procedure unrelated to principal diagnosis	NV	2.1816	2.2175	2.2014	-73
477		SURG	Non-extensive O.R. procedure unrelated to principal diagnosis	NV	1.4395	1.4338	1.4337	-01
478	5	SURG	Other vascular procedures with CC	NV	2.4189	2.2177	2.1645	-2.40
479	5	SURG	Other vascular procedures w/o CC	NV	1.3208	1.3259	1.2718	-4.08
480		SURG	Liver transplant	NV	15.2645	22.8213	20.1614	-11.66
481		SURG	Bone marrow transplant	NV	12.4485	15.2890	15.2244	-42
482		SURG	Tracheostomy with mouth, larynx or pharynx disorder	NV	3.2660	3.1795	3.4826	9.53
483		SURG	Tracheostomy except for mouth, larynx or pharynx disorder	NV	14.0597	14.1506	16.6590	17.73
484	24	SURG	Craniotomy for multiple significant trauma	NV	6.9972	6.2599	6.5706	4.96
485	24	SURG	Limb reattach, hip and femur procs for multi sign trauma	NV	3.2621	3.0632	3.1669	3.39
486	24	SURG	Other O.R. procedures for multiple significant trauma	NV	4.9603	5.2491	4.8321	-8.12
487	24	MED	Other multiple significant trauma	NV	1.8324	1.8218	1.9406	6.52
488	25	SURG	HIV w/extensive O.R. procedure	NV	4.1296	4.3106	4.1539	-3.64
489	25	MED	HIV with major related condition	NV	2.0674	1.9790	1.9151	-3.23
490	25	MED	HIV with or w/o other related condition	NV	1.1808	1.1904	1.1285	-5.20
491	8	SURG	Major joint and limb reattachment procedures-upper extremity	NV	NC	1.5633	1.5676	.28
492	17	MED	Chemotherapy with acute leukemia as secondary diagnosis	NV	NC	2.5737	2.7815	8.07

*DRG definition substantially revised for discharges occurring on or after October 1, 1992. NC—Denotes a new DRG category defined for discharges occurring on or after October 1, 1992. NV—Denotes a DRG category that is not valid for classification and payment under PPS.

Source: ProPAC and the Federal Register: August 30, 1991; Vol. 56, No. 169.

APPENDIX E. MEDICARE REIMBURSEMENT TO PHYSICIANS

PHYSICIAN PAYMENT REFORM

The Omnibus Budget Reconciliation Act of 1989 (OBRA 1989) provided for the implementation, beginning January 1, 1992, of a new payment system for physicians' services paid for by Medicare. A new fee schedule payment system replaces the previous reasonable charge payment system. The new system was enacted in response to two principal concerns. The first was the rapid escalation in program payments. Over the 1965-89 period, Medicare spending for physicians' services had increased at an average annual rate of 11.7 percent, outstripping both the increase in medical care inflation and the rate of growth in the number of Medicare enrollees. The second concern was that the use of the reasonable charge payment had led, in many cases, to payments which were not directly related to the resources used.

Under the new system, payments are made under a fee schedule which is based on a resource-based relative value scale (RBRVS). The new system is being phased in over the 1992-96 period. OBRA 1989 also created a volume performance standard to moderate the rate of growth in physician expenditures. Further, it increased protections for beneficiaries by placing more stringent limits on amounts that physicians can bill in excess of Medicare's approved payment amount. Taken together, these three elements are referred to as the three-part physician payment reform package. The legislation also authorized increased funding for research on patient outcomes for selected medical treatments and surgical procedures to assess their appropriateness, necessity, and effectiveness. The Omnibus Budget Reconciliation Act of 1990 (OBRA 1990) included minor changes in the OBRA 1989 provisions.

The Department of Health and Human Services (DHHS) issued final implementing regulations on November 25, 1991. Additional regulations were issued November 25, 1992.

MEDICARE FEE SCHEDULE

The Secretary of DHHS is required to establish a fee schedule before January 1 of each year that sets payment amounts for all physicians' services furnished in all fee schedule areas for the year. The fee schedule amount for a service is equal to the product of:

The relative value for the service;

The geographic adjustment factor (GAF) for the service for the fee schedule area; and

The national dollar conversion factor for the year.

Relative value unit. The relative value unit (RVU) for each service has three components.

The physician work component reflects physician time and intensity, including activities before and after patient contact.

The *practice expense or overhead component* includes all categories of practice expenses (exclusive of malpractice liability insurance costs). Included are office rents, employee wages, physician compensation, and physician fringe benefits.

The *malpractice expense component* reflects costs of obtaining malpractice insurance.

The proportion that each component represents of the total RVU varies by service.

Geographic adjustment factor. The second major factor used in calculation of the fee schedule is the geographic adjustment factor (GAF) for the fee schedule area. There are currently 233 fee schedule areas nationwide.

The GAF is designed to account for geographic variations in the costs of practicing medicine and obtaining malpractice insurance as well as a portion of the difference in physicians' incomes that is not attributable to these factors.

The GAF is the sum of three indices. Separate geographic practice cost indices (GPCIs) have been developed for each of the three components of the RVU, namely a work GPCI, a practice expense or overhead GPCI, and a malpractice GPCI. In effect, a separate geographic adjustment is made for each component. However, as required by law, only one-quarter of the geographic variation in physician work resource costs is taken into account in the formula. (Table 25 at the end of this chapter shows the GAF values for each of the 233 fee schedule areas nationwide.)

The three GPCI-adjusted RVU values are summed to produce an indexed RVU for each locality.

Conversion factor. The conversion factor is a dollar multiplier which converts the geographically adjusted relative value for a service to an actual payment amount for the service. The law requires the establishment of an initial dollar conversion factor. The conversion factor is updated annually beginning in 1992.

The law required the calculation of an initial dollar conversion factor which was *budget neutral* relative to 1991 predicted expenditure levels. This means that if the initial conversion factor had applied in 1991, Medicare spending would equal what was projected to be spent under the reasonable charge payment system in that year. The law also contained provisions relating to payment calculations during the 1992-96 phase-in period; these are the transition provisions. The Department's final implementing regulations included an adjustment to reconcile the calculations required under both the budget neutrality and transition provisions. (This adjustment to the "adjusted historical payment basis" is discussed under "Transition rules," below.)

The initial dollar conversion factor was set at \$30.42. The 1992 update was set at 1.9 percent. (See discussion of update calculation below.) Therefore the 1992 conversion factor was \$31.001.

Beginning in 1993 two conversion factors apply—one for surgical services and one for nonsurgical services. The 1993 conversion factor for surgical services is \$31.96; the conversion factor for nonsurgical services is \$31.25.

Payment formula. In simplified terms the payment for each service is calculated as follows:

$$\text{PAYMENT} = \text{CF} \times [(\text{RVU}_{\text{work}} \times \text{GPCI}_{\text{work}}) + (\text{RVU}_{\text{practice expense}} \times \text{GPCI}_{\text{practice expense}}) + (\text{RVU}_{\text{malpractice}} \times \text{GPCI}_{\text{malpractice}})]$$

Where:

CF = conversion factor

RVU_{work} = physician work relative value units for the service;

GPCI_{work} = geographic practice cost index value for physician work in the locality (the value reflects only one-quarter of the variation in physician work as required by law);

RVU_{practice expense} = practice expense or overhead relative value units for the service;

GPCI_{practice expense} = geographic practice cost index value for practice expense or overhead applicable in the locality;

RVU_{malpractice} = malpractice relative value units for the service;

GPCI_{malpractice} = geographic practice cost index value for malpractice applicable in the locality.

Transition rules. The law establishes specific payment rules for the 1992-1996 phase-in period. To determine payments in 1992, comparisons were made between the fee schedule amount and the "adjusted historical payment basis" (AHPB) in the payment locality. Generally, the AHPB was equal to the average Medicare allowance for the service in the locality in 1991, updated to 1992. Implementing regulations applied a 5.5 percent downward adjustment to this amount in order to maintain budget neutrality over the 5-year transition period.

If the reduced AHPB in a locality was less than 15 percent over or under the fee schedule amount, payments were made on the basis of the fee schedule beginning in 1992. A transition was provided in the case of differences larger than 15 percent. In 1992, the reduced AHPB amounts were increased or decreased by *15 percent of the fee schedule amount*, whichever was appropriate. Thus, for a service more than 15 percent *below* the fee schedule the payment equaled the reduced AHPB *plus* 15 percent fee schedule amount. For a service more than 15 percent *above* the fee schedule, the payment equaled the reduced AHPB *minus* 15 percent fee schedule amount.¹

For 1993-95, payment is based on a blend of the previous year's amount (updated to the current year) and the fee schedule amount; over the period, a gradually increasing portion is based on the fee schedule. In 1993, 75 percent is based on the previous year's amount adjusted by the update factor specified for the year and 25 percent is based on the fee schedule amount for the year. The percentage attributable to the previous year's fee is reduced to 67 percent in 1994 and 50 percent in 1995. All services are paid on the basis of the fee schedule beginning in 1996.

¹ Special transition rules apply to radiology services. If the AHPB exceeds 109 percent of the fee schedule amount (rather than the 15 percent applicable to other services), the payment amount is the AHPB minus 9 percent of the fee schedule amount (rather than 15 percent).

MEDICARE VOLUME PERFORMANCE STANDARDS; CONVERSION FACTOR
UPDATE

A key element of the fee schedule is the conversion factor. One consideration in establishing the annual update in the conversion factor is whether efforts to stem the annual rate of growth in physician payments have succeeded. This is measured by the Medicare volume performance standard (MVPS).

Medicare volume performance standards. The law requires the calculation of annual MVPSSs, which are standards for the rate of expenditure growth. The purpose of these standards is to provide an incentive for physicians to get involved in efforts to stem expenditure increases. The relationship of actual expenditures to the MVPS is one factor used in determining the annual update in the conversion factor.

Implementation of the MVPS provision began in fiscal year 1990. OBRA 1989 effectively set a performance standard rate of increase for fiscal year 1990 (9.1 percent) for all physicians' services and specified a process for determining the standard in future years. OBRA 1990 specified that the fiscal year 1991 MVPS rates of increase were to be set at the estimated baseline percentage increase in expenditures, minus 2 percentage points. OBRA 1990 also provided, beginning for fiscal year 1991, for the calculation of a standard for all physicians' services, and for two subcategories of physicians' services: surgical services and other services. Thus, the fiscal year 1991 MVPS was 7.3 percent for all physicians' services, 3.3 percent for surgical services and 8.6 percent for nonsurgical services.

Generally, the Congress is expected to specify the performance standard. The Secretary of DHHS is required to make a recommendation to the Congress by April 15 each year. In making the recommendation, the Secretary is to consider inflation, changes in the number of part B enrollees, changes in technology, appropriateness of care, and access to care. The Physician Payment Review Commission (PhysPRC), a Congressional advisory body, is required to review the Secretary's recommendation and submit its own recommendation by May 15.

As noted, the Congress is generally expected to establish the MVPS. However, if Congress does not specify the standard, a so-called default mechanism, which is specified in law, is used. The *default standard* is the product of numbers representing the following comparisons:

Secretary's estimate of the weighted average percentage increase in physicians' fees for services in the portions of the calendar years included in the fiscal year involved;

Secretary's estimate of the percentage change from the previous year in the number of part B enrollees;

Secretary's estimate of the average annual percentage growth in volume and intensity of services for the 5 fiscal year period ending with the preceding fiscal year; and

Secretary's estimate of the percentage change in physician expenditures in the fiscal year (not taken into account above) which will result from changes in law or regulations.

This product is *reduced* by a specified amount, i.e., 1 percentage point in fiscal year 1991, 1½ percentage points in fiscal year 1992, and 2 percentage points in subsequent years. (The amount of the reduction is referred to as the “performance standard factor.”)

The MVPS for fiscal year 1993 is based on the default formula. It is set at 10.0 percent for all physicians services, 8.4 percent for surgical services and 10.8 percent for nonsurgical services (see table 1).

TABLE 1.—MEDICARE VOLUME PERFORMANCE STANDARDS

[In percent]

Fiscal year	Surgical	Nonsurgical	All
1990	(¹)	(¹)	9.1
1991	3.3	8.6	7.3
1992	6.5	11.2	10.0
1993	8.4	10.8	10.0

¹ Separate performance standards for surgical and nonsurgical services not required for fiscal year 1990.

TABLE 2.—CBO PROJECTIONS OF MEDICARE VOLUME PERFORMANCE STANDARDS

[Fiscal years, in percent]

	1990	1991	1992	1993	1994	1995	1996	1997	1998
MVP standard overall ¹	9.1	7.3	10.0	10.0	15.6	11.6	9.5	8.9	8.7
Growth in overall expenditures	10.0	8.6	3.7	11.1	17.9	14.3	12.2	11.7	11.5
Difference	-0.9	-1.3	6.3	-1.1	-2.3	-2.7	-2.8	-2.8	-2.9
Maximum allowable reduction			-2.0	-2.0	-2.5	-2.5	-3.0	-3.0	-3.0
MEI Adjustment			-.9	-1.3	6.3	-1.1	-2.3	-2.7	-2.8
MVP standard surgical service		3.3	6.5	8.4	(²)	(²)	(²)	(²)	(²)
Growth in surgical expenditures		(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Difference		(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Maximum allowable reduction			-2.0	-2.0	-2.5	-2.5	-3.0	-3.0	-3.0
MEI adjustment			-1.5	.4	(²)	(²)	(²)	(²)	(²)
MVP standard nonsurgical services		8.6	11.2	10.8	(²)	(²)	(²)	(²)	(²)
Growth in nonsurgical expenditures		(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Difference		(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Maximum allowable reduction			-2.0	-2.0	-2.5	-2.5	-3.0	-3.0	-3.0
MEI adjustment			-1.5	-1.9	(²)	(²)	(²)	(²)	(²)
Projected MEI (calendar year)	4.2	4.6	3.1	2.7	2.6	2.7	2.6	2.6	2.6
Adjusted overall MEI (calendar year) ³			1.9	1.4	8.9	1.6	.3	-.1	-.2

¹ The 1990, 1991, 1992, and 1993 standards were announced by the Secretary of HHS. Standard values for 1994–98 are CBO projections.

² Because of uncertainty over the redistributive effects of the physician fee schedule on the categories of services, CBO projects only an overall default standard for 1994–98.

³ The 1990 and 1991 MEI updates were not affected by the Medicare volume performance standard process, however, physician's fees for both years were reduced by other legislation. In addition to the 1.5 percentage point reduction shown here for 1992, OBRA 1990 reduced the 1992 MEI by 0.4 percentage points, so the adjusted overall MEI for 1992 is 3.2 minus 1.3, or 1.9 percent.

Source: Congressional Budget Office.

Table 2 shows CBO projections of the MVPS and components of the MVPS through fiscal year 1998.

Conversion factor update. Annual updates in payments under the fee schedule are made by updating the dollar conversion factor. The Congress is generally expected to specify the percentage increase in the conversion factor. In April of each year (beginning in 1991), the Secretary of DHHS is required to recommend to the Congress an update (or updates) in the conversion factor for the following year.

In making the update recommendation, the Secretary is required to consider a number of factors including the percentage change in actual expenditures in the preceding fiscal year compared to the MVPS for that year, changes in volume and intensity of services, beneficiary access to care, and the increase in the Medicare Economic Index (MEI). The MEI is a percentage figure which is revised annually; it has been used in the program to limit annual increases in recognized fees. The MEI is generally intended to reflect annual increases in the costs of operating a medical practice; however, for several years the MEI percentage was set by the Congress. (See table 3 for a history of MEI updates.)

The PhysPRC is required to review the Secretary's update recommendation and submit its own recommendation to Congress by May 15.

The Congress either specifies the update to the conversion factor or a default formula, specified in law, applies. The *default fee update* is equal to the Secretary's estimate of the MEI increased or decreased by the percentage difference between the increase in actual expenditures and the MVPS for the second preceding fiscal year. (Thus, the 1993 updates reflect actual fiscal year 1991 experience.) However, the law specifies a lower limit on the default update. The minimum update is the MEI minus 2 percentage points in 1992 and 1993, MEI minus 2½ percentage points in 1994 and 1995, and MEI minus 3 percentage points in the subsequent years.

The default update was used for 1992; it was 1.9 percent. Separate updates for surgical and nonsurgical services were not calculated for 1992 because separate MVPSs (which are used in the update calculation) were not made for fiscal year 1990.

The default formula was also used in 1993. The 1993 MEI is 2.7 percent. The conversion factor for surgical services was increased to 3.1 percent because the growth rate in spending for surgical services was 0.4 percent less than the fiscal year 1991 MVPS. The conversion factor for nonsurgical services was decreased to 0.8 percent because Medicare spending for nonsurgical services exceeded the fiscal year 1991 MVPS by 1.9 percent.

TABLE 3.—MEDICARE ECONOMIC INDEX AND PERCENTAGE INCREASES OVER PRIOR PERIOD, 1973–1993

Fee screen period	Index value	Annual increase (percent)
July 1, 1973	1.000	NA
July 1, 1975 to June 30, 1976	1.179	17.90
July 1, 1976 to June 30, 1977	1.276	8.23
July 1, 1977 to June 30, 1978	1.357	6.35
July 1, 1978 to June 30, 1979	1.426	5.08
July 1, 1979 to June 30, 1980	1.533	7.50
July 1, 1980 to June 30, 1981	1.658	8.15
July 1, 1981 to June 30, 1982	1.790	7.96
July 1, 1982 to June 30, 1983	1.949	8.88
July 1, 1973 to June 30, 1984	2.063	5.85
July 1, 1984 to Apr. 30, 1986	2.063	¹ 0
May 1, 1986 to Dec. 31, 1986	2.148	² 4.15
Jan. 1, 1987 to Mar. 31, 1988	2.217	³ 3.20
Primary care services:		
Apr. 1, 1988 to Dec. 31, 1988	2.297	⁴ 3.60
Jan. 1, 1989 to Mar. 31, 1990	2.366	⁵ 3.00
Apr. 1, 1990 to Dec. 31, 1990	2.465	⁶ 4.20
Jan. 1, 1991 to Dec. 31, 1991	2.515	2.00
Jan. 1, 1992 to Dec. 31, 1992	2.595	3.20
Jan. 1, 1993 to Dec. 31, 1993	2.665	2.70
Other services:		
Apr. 1, 1988 to Dec. 31, 1988	2.239	⁴ 1.00
Jan. 1, 1989 to Mar. 31, 1990	2.262	⁵ 1.00
Apr. 1, 1990 to Dec. 31, 1990	2.307	⁷ 2.00
Jan. 1, 1991 to Dec. 31, 1991	2.307	0
Jan. 1, 1992 to Dec. 31, 1992	2.381	3.20
Jan. 1, 1993 to Dec. 31, 1993	2.445	2.70
Anesthesiology, radiology and overvalued procedures: ⁸		
Apr. 1, 1990 to Dec. 31, 1990	2.262	0
Jan. 1, 1991 to Dec. 31, 1991	2.262	0
Jan. 1, 1992 to Dec. 31, 1992	2.334	3.20
Jan. 1, 1993 to Dec. 31, 1993	2.397	2.70

¹ MEI was held constant during fee freeze.

² Percentage increase was mandated by Public Law 99-272 and applied only to participating physicians.

³ Percentage increase was mandated by Public Law 99-509 and applied to both participating and nonparticipating physicians. Prevailing charges of nonparticipating physicians were 96 percent of the prevailing charges for participating physicians.

⁴ Percentage increase was mandated by Public Law 100-203. Prevailing charges for services provided by nonparticipating physicians are 95.5 percent of the prevailing charges for participating physicians.

⁵ Percentage increase was mandated by Public Law 100-203. Prevailing charges for services provided by nonparticipating physicians are 95 percent of the prevailing charges for participating physicians.

⁶ Prevailing charges for services provided by nonparticipating physicians are 95 percent of the prevailing charges for participating physicians.

⁷ Percentage increase was mandated by P.L. 100-239. Prevailing charges for services provided by nonparticipating physicians are 95 percent of the prevailing charges for participating physicians.

⁸ Services considered overpriced are specified in table 2 in the "Joint Explanatory Statement of the Committee of Conference" submitted with the conference report to accompany P.L. 100-239.

NA—Not applicable.

LIMITS ON BENEFICIARY LIABILITY

Medicare pays 80 percent of the fee schedule amount after the beneficiary has met the \$100 deductible for the year. The beneficiary is responsible for the remaining 20 percent, known as coinsurance. If a physician does not accept *assignment* on a claim, the beneficiary may be liable for additional charges known as *balance billing charges*. However, the law places certain limits on these balance billing charges.

Assignment/participation. The new payment system retains the Medicare concepts of assignment and participation. As under the previous reasonable charge payment system, a physician is able to choose whether or not to accept assignment on a claim paid under the fee schedule. In the case of an assigned claim, the physician bills the program directly and is paid an amount equal to 80 percent of the fee schedule amount (less any unmet deductible). The physician may not charge the beneficiary more than the applicable deductible and coinsurance amounts. In the case of nonassigned claims, the physician still bills the program directly; however, Medicare payment is made to the beneficiary. In addition to the deductible and coinsurance amounts, the beneficiary is liable for the difference between the fee schedule amount and the physician's actual charge, subject to certain limits. This is known as the *balance billed* amount.

A physician may become a *participating physician*. A participating physician is one who voluntarily enters into an agreement with the Secretary of DHHS to accept assignment on all claims for the forthcoming year. Medicare patients of these physicians never face balance billing charges.

The law includes a number of incentives for physicians to become participating physicians, chief of which is higher recognized fee schedule amounts. The fee schedule amount for a nonparticipating physician is only 95 percent of the recognized amount for a participating physician.

The law specifies that physicians are required to accept assignment on all claims for persons who are dually eligible for Medicare and Medicaid. This includes "qualified Medicare beneficiaries" (QMBs); these are persons with incomes below poverty for whom Medicaid is required to pay Medicare premiums and cost-sharing charges.

Balance billing limits. For several years, the law has placed limits on balance billing charges. From 1987-90, the program placed a physician-specific limit on actual charges of physicians which was known as the maximum allowable actual charge or (MAAC). Beginning in 1991, new limits were phased in.

The new limiting charges are set at a maximum percentage above the recognized payment amount (the prevailing charge in 1991 or the Medicare fee schedule amount in subsequent years) for nonparticipating physicians. Recognized payment amounts for nonparticipating physicians are 95 percent of such amounts for participating physicians. The limiting charges are therefore a percentage of this reduced amount.

In 1991, a physician's limiting charge was the same percentage (not to exceed 25 percent) above the 1991 recognized payment

amount as their 1990 MAAC was above the 1990 recognized payment amount. This was referred to as the 125-percent limit. In 1991 only, the limit for evaluation and management services, was 140 percent.

For 1992, a physician's limiting charge was the same percentage (not to exceed 20 percent) above the 1992 payment amount as their 1991 limiting charge was above the 1991 recognized payment amount. This is referred to as the 120-percent limit. For 1993 and subsequent years, the limiting charge for all physicians is 115 percent of the fee schedule amount for nonparticipating physicians for the year.

MEDICAL CARE OUTCOMES AND EFFECTIVENESS RESEARCH

In the fourth part of the physician payment reform package, Congress created a new agency, the Agency for Health Care Policy and Research, which replaced the then existing National Center for Health Services Research in the Public Health Service. The mission of the new agency is to enhance the quality, appropriateness and effectiveness of health care services and access to such services. These goals are to be accomplished by establishing a broad base of scientific research and promoting improvements in the clinical practice of medicine and the organization, financing and delivery of health care services.

Specifically, the agency is directed to conduct and support research, demonstration projects, evaluations, training, guideline development and the dissemination of information on health care services and delivery systems, including activities on: (1) the effectiveness, efficiency, and quality of health care services; (2) the outcomes of health care services and procedures; (3) clinical practice, including primary care and practice-oriented research; (4) health care technologies, facilities and equipment; (5) health care costs, productivity and market forces; (6) health promotion and disease prevention; (7) health statistics and epidemiology; and (8) medical liability.

IMPACT OF FEE SCHEDULE

When DHHS issued final payment regulations in November 1991, it provided estimates of the impact of the fee schedule on payments by physician specialty and by State. Comparisons were provided for both 1992 and 1996 between payments that would be made under the new system versus those that would have been made if the reasonable charge payment system had remained in place. The impact tables were based on DHHS assumptions regarding both the number and type of services that would be provided. Of particular importance, was the projected increase in the volume and intensity of services. The Department contended that past experience suggested that implementation of the new system would be accompanied by increases in volume and intensity of services. To account for this increase, DHHS made a "baseline adjustment" in the conversion factor. (In the past, this type of adjustment was referred to as a behavioral adjustment or volume offset.) The effect of this baseline adjustment was reflected in the impact tables. Payments *per service* were estimated to decline; however, total Medi-

care payments were expected to be exactly the same as they would have been under the old system in both 1992 and 1996. Tables 4 and 5 show the DHHS estimates, made in November 1991, by physician specialty and by State. It should be noted that these figures do not reflect fee updates for 1992 and subsequent years.

Impact by specialty. In 1992, payments *per service* for all physician specialties were expected to decline by 3 percent compared to payments that would have been made under the reasonable charge system. These reductions were due to the net effect of the baseline adjustment. In general, primary care physicians were expected to receive higher payments per service, while specialty physicians were expected to receive lower payments per service. For example, payments per service were expected to increase by 15 percent for family practitioners and 17 percent for general practitioners in 1992. The largest decrease in payments per service in 1992 were expected for thoracic surgeons (−14 percent), followed by ophthalmologists and anesthesiologists (both −11 percent) and gastroenterologists, radiologists, pathologists, and neurosurgeons (all −10 percent).

The only exception to the pattern of declining payments per service for specialties applied to individuals who are sometimes referred to as limited licensed practitioners. They include optometrists, chiropractors (who can only bill Medicare for one procedure), and podiatrists. Payments to these practitioners were expected to rise because the relative values of their services had been undervalued in comparison to other physicians' services. In 1992, payments per service were expected to increase by 20 percent for optometrists, 12 percent for chiropractors, and 6 percent for podiatrists.

By 1996, overall payments *per service* for all specialties were expected to be 6 percent less than they would have been under the reasonable charge payment system. The trend toward higher payments for primary care practitioners and lower payments for specialists continued, with the same exception for limited licensed practitioners. Payments per service were expected to be 28 percent higher for family practitioners and 27 percent higher for general practitioners. Declines in payments per service in 1996 were projected to exceed 20 percent for the following specialties: anesthesiologists and thoracic surgeons (both −27 percent); radiologists (−22 percent); ophthalmologists (−21 percent); and pathologists (−20 percent). Payments per service were expected to increase by 41 percent for optometrists; 26 for chiropractors; and 14 percent for podiatrists.

Overall, *total Medicare payments* to physicians were expected to be exactly the same as they would have been under the old system in both 1992 and 1996. The trends in total payments by specialty were similar to those in payments per service. Total payments for previously undervalued specialties were expected to increase and total payments to overvalued specialties were expected to decline. In 1996, total payments to family practitioners were expected to increase 30 percent over reasonable charge payments, and payments to general practitioners were expected to increase by 29 percent. In 1996, declines in total payments of more than 10 percent were ex-

pected for four specialties: thoracic surgeons and anesthesiologists (–14 percent); ophthalmologists and radiologists (–11 percent).

TABLE 4.—ESTIMATED MEDICARE PHYSICIAN FEE SCHEDULE: IMPACT BY SPECIALTY ¹

[In percent]

Specialty	1992		1996	
	Payments per service	Total payments	Payments per service	Total payments
All physician specialties.....	–3	0	–6	0
Family practice.....	15	16	28	30
General practice	17	18	27	29
Cardiology	–9	–3	–17	–8
Dermatology	–1	0	0	2
Internal medicine.....	0	1	5	7
Gastroenterology.....	–10	–4	–18	–9
Nephrology	–6	–2	–9	–5
Neurology	–4	–2	–4	–2
Psychiatry	–2	–1	3	5
Pulmonary	–3	–1	–2	0
Urology.....	–6	–2	–8	–4
Radiology.....	–10	–4	–22	–11
Anesthesiology.....	–11	–4	–27	–14
Pathology	–10	–4	–20	–10
General surgery	–8	–3	–13	–7
Neurosurgery.....	–10	–4	–18	–9
Ophthalmology.....	–11	–4	–21	–11
Orthopedic surgery	–8	–3	–11	–5
Otolaryngology.....	2	3	3	5
Plastic surgery	–8	–3	–13	–6
Thoracic surgery.....	–14	–5	–27	–14
Clinics	–1	0	–1	1
Optometry	20	21	41	43
Chiropractic.....	12	13	26	28
Podiatry.....	6	7	14	16

¹ Does not reflect annual fee updates.

Source: DHHS, November 1991.

Impact by State. Overall, payments *per service* were expected to decline by 3 percent in 1992. Payments per service were expected to decline in all States except eight (Colorado, Idaho, Iowa, Michigan, Minnesota, Mississippi, Rhode Island, and Wyoming). The States expected to incur the largest declines in payments per service were: Alaska (–10 percent); Florida (–8 percent); Hawaii (–8 percent), and Nevada (–9 percent). Payments were expected to decline the most in States where reasonable charge payments were higher than the national average.

By 1996, declines in payments per service were expected to exceed 10 percent in the following States: Alaska (–19 percent); Arizona (–13 percent); California (–14 percent); Florida (–17 percent); Hawaii (–16 percent); Maryland (–10 percent); Nevada (–20

percent) and Texas (−11 percent). Sixteen States were expected to experience increases in payments per service by 1996, but these gains were generally modest. Only in Mississippi was the increase expected to exceed 10 percent; in this State payments per service were projected to be 12 percent higher by 1996.

Total payments to all the States in both 1992 and 1996 were expected to be the same as those that would have been made under the reasonable charge system. In 1996, increases in total payments were expected to exceed 10 percent in only three States: Colorado, and Iowa, (both 11 percent); and Mississippi (14 percent). Expected decreases in total payments to States in 1996 were small. The largest decreases are expected in Alaska and Nevada (both −6 percent).

TABLE 5.—ESTIMATED MEDICARE PHYSICIAN FEE SCHEDULE: IMPACT BY STATE ¹

[In percent]

	1992		1996	
	Payments per service	Total payments	Payments per service	Total payments
All States	−3	0	−6	0
Alabama	−4	−1	−6	−2
Alaska	−10	−2	−19	−6
Arizona	−6	−1	−13	−4
Arkansas	−4	−1	−7	−2
California	−5	−1	−14	−4
Colorado	2	4	9	11
Connecticut	−4	−1	−8	−2
Delaware	−2	0	−4	−1
District of Columbia	−3	−1	−7	−2
Florida	−8	−2	−17	−5
Georgia	−3	−1	−6	−2
Hawaii	−8	−2	−16	−5
Idaho	0	2	6	8
Illinois	−3	−1	−5	−1
Indiana	−2	0	−2	0
Iowa	0	2	9	11
Kansas	−3	−1	−4	−1
Kentucky	−1	1	0	2
Louisiana	−4	−1	−7	−2
Maine	−1	1	1	3
Maryland	−4	−1	−10	−3
Massachusetts	−4	−1	−3	−1
Michigan	0	2	4	6
Minnesota	0	2	7	9
Mississippi	1	3	12	14

TABLE 5.—ESTIMATED MEDICARE PHYSICIAN FEE SCHEDULE: IMPACT BY STATE ¹—
Continued
[In percent]

	1992		1996	
	Payments per service	Total payments	Payments per service	Total payments
Missouri	-1	1	1	3
Montana	-2	0	-2	0
Nebraska	-1	1	1	3
Nevada	-9	-2	-20	-6
New Hampshire	-1	1	6	8
New Jersey	-2	0	-4	-1
New Mexico	-3	-1	-9	-3
New York	-4	-1	-8	-2
North Carolina	-3	-1	-2	0
North Dakota	-4	-1	-5	-2
Ohio	-3	-1	-7	-2
Oklahoma	-2	0	-3	-1
Oregon	-2	0	-2	0
Pennsylvania	-2	0	-4	-1
Rhode Island	0	2	1	3
South Carolina	-2	0	4	6
South Dakota	-2	0	0	2
Tennessee	-3	-1	-2	0
Texas	-4	-1	-11	-3
Utah	-1	1	5	7
Vermont	-1	1	2	4
Virginia	-1	1	4	6
Washington	-1	1	-1	1
West Virginia	-3	-1	-7	-2
Wisconsin	-2	0	-1	1
Wyoming	1	3	8	10

¹ Does not reflect annual fee updates.

Source: DHHS, November, 1991.

SELECTED FEE SCHEDULE ISSUES

Establishment of relative values. Relative value units (RVUs) for physician work were based primarily on work done by a Harvard University research team. DHHS used panels of carrier medical directors to review comments received on the values contained in the proposed regulations to fill gaps in the Harvard RVS, and to resolve identified anomalies.

In recognition of that fact that further refinements might be necessary, DHHS designated the relative work values implemented on

January 1, 1992 as "initial" values. It provided for a 120 day comment period; however, no changes in the initial work values were expected to be made before January 1, 1993; however, DHHS did issue a number of technical corrections to the RVUs in April 1992.

During 1992, DHHS conducted an extensive review of a number of the work RVUs based on comments from medical specialty societies. It convened 24 multispecialty panels of physicians to assist in the refinement process. The refinement resulted in an increase in the work RVU for 360 services and a decrease for 35 services.

During 1992, DHHS also developed work relative values for new or revised procedure codes. Recommendations for these value were made by the new American Medical Association (AMA)/Specialty Society Relative Value Update Committee (RUC). DHHS reviewed these recommendations and either adopted them (55 percent of the cases) or modified them (45 percent of the cases).

The net impact of the refinement process and the process for assigning values for new codes would have resulted in Medicare physician payments in excess of the budget neutrality level required by law. As a result, RVUs have been reduced by 2.783 percent across-the-board to achieve budget neutrality. The reduction is made to the total RVU (i.e., the work, practice expense, and malpractice components).

Visit codes. Approximately one-third of Medicare expenditures for physicians' services are made for medical visits and consultations; these are referred to as evaluation and management services. Physicians bill for these services based on current procedure and terminology (CPT) codes developed by the American Medical Association (AMA).

Historically, there were wide variations in the way physicians used visit codes. To a degree, these differences could be accommodated under the old reasonable charge payment system. However, uniform definitions were needed under the new fee schedule. This is because a single relative value is assigned to each code nationwide.

The CPT editorial panel adopted new definitions and new code numbers for all visit categories for 1992. The physician work relative value units are based on these new definitions. The new definitions rely primarily on the clinical content of the visit to differentiate among levels of care. Most codes also indicate the typical amount of time spent by a physician in performing the service; this is an ancillary factor in code selection.

DHHS provided for implementation of the new coding system, effective January 1, 1992; physicians were, however, given a two month grace period during which they could bill using either the old or new codes.

Global surgery policy. Medicare carriers have typically bundled payment for services associated with a surgery into one code, which is referred to as a global surgical service. Historically, there have been differences among carriers in the scope and duration of services included in the global surgery payment.

Effective January 1, 1992, a uniform global surgery policy applies. The services included in the package are all preoperative services provided on the day before the surgery, all intraoperative services that are a normal and necessary part of the surgical proce-

dures, and all related services provided during a 90-day postoperative period (with the exception of services provided in connection with return trips to the operating room). The initial consultation with the surgeon is outside the global surgical package.

Specific rules also apply for minor surgeries and endoscopies. No payment will generally be made for a visit on the same day as the procedure unless a separately identifiable service is furnished. A zero or 10 day postoperative period applies for minor surgeries. (Those with a 10 day period are listed in an addendum to the final regulations.) There is no postoperative period for endoscopies performed through an existing body orifice. Other endoscopies are subject to either the major or minor surgical service policy, whichever is appropriate.

Anesthesia services. For several years, payments to anesthesiologists were made on the basis of a fee schedule which predated the RBRVS fee schedule. This anesthesia fee schedule used a separate set of relative values, known as the relative value guide, for anesthesia services which were developed by the American Society of Anesthesiology. Generally, the number of relative value units was the sum of base units and time units.

Generally, the allowable base units from the relative value guide were used when anesthesia services were integrated into the overall fee schedule. Unlike the policy for other services, DHHS temporarily retained the use of actual time in the final regulations; this was done pending further study of the issue. The retention of actual time requires that anesthesia services have a separate conversion factor. The anesthesia conversion factor in 1993 is \$14.05.

Anesthesia services may be performed directly by the anesthesiologist, by a certified registered nurse anesthetist (CRNA) under the medical direction of an anesthesiologist or by a non-medically directed CRNA. If a physician personally performs the anesthesia service, payment is based on the anesthesia-specific conversion factor and unreduced base units and time units with each time unit equivalent to 15 minutes. For medically directed services, each time unit is equivalent to 30 minutes. Further, the base units are reduced as follows. The amount of the reduction is 10 percent for the concurrent supervision of two procedures, 25 percent for the concurrent supervision of three procedures and 40 percent for the concurrent supervision of four procedures.

CRNAs are paid under a CRNA fee schedule based on allowable base and time units and the appropriate conversion factor. Beginning in 1992, the same relative values are used for determining payment for both physician anesthesia services and CRNA services. Since the use of actual time is temporarily being retained for physician anesthesia services, it is also being retained for CRNA services. The law specifies conversion factors for both non-medically directed and medically directed CRNAs; these conversion factors are geographically adjusted. The conversion factor for a non-medically directed CRNA will be limited to the anesthesia conversion factor applicable in the locality. A similar limit is not applied to the conversion factor applicable for medically directed CRNAs.

DHHS has indicated that for 1992 and 1993 only, it will recognize an attending physician relationship, and pay an unreduced fee, if the teaching anesthesiologist is involved in two concurrent proce-

dures involving interns or residents. Beginning in 1994, an unreduced fee will be paid only if a teaching anesthesiologist is involved in a single procedure with an intern or resident.

Radiology services. Prior to 1992, radiology services performed by radiologists (or physicians for whom radiology services accounted for at least 50 percent of their Medicare billings) were paid under a radiology fee schedule. The relative values were based on values developed by the American College of Radiology. As required by law, DHHS integrated the radiology fee schedule into the overall fee schedule.

Special payment rules apply to certain categories of radiology services. For portable X-ray services, national relative value units have been established which reflect equipment set-up costs per procedure. Associated transportation costs will continue to be priced locally.

The use of complete procedure codes is being discontinued for interventional radiological services; this is consistent with CPT changes. Payment of the full fee schedule amount will be made for the radiological portion (supervision and interpretation code) of an interpretive radiologic service and for the primary nonradiologic service (the surgical code). For any other procedure codes, a reduction would apply.

Physician pathology services. A limited number of the services listed in the pathology section of the CPT are identified as physician pathology services. The remainder are generally clinical diagnostic laboratory services which are paid under a separate fee schedule.

The law requires an adjustment to reflect the technical component of furnishing physician pathology services through a laboratory that is independent of a hospital and separate from a physician's office. DHHS set the technical component at 15 percent of the professional component amount. DHHS also identified a new category of services—clinical laboratory interpretation services. Fifteen clinical laboratory codes have been identified for which a separate payment may be made if the interpretation is requested by the patient's attending physician, results in a written narrative report, and requires exercise of medical judgment by the pathologist.

New physicians. By law, new physicians are paid at a reduced rate for the first four years of practice. During this time, payments equal 80 percent of the fee schedule in the first year, 85 percent in the second year, 90 percent in the third year, and 95 percent in the fourth year. The policy does not apply to primary care services or services furnished in health manpower shortage areas. Primary care services are defined as office medical services, emergency department services, home medical services, skilled nursing, intermediate care, and long-term care medical services, or nursing home, boarding home, domiciliary, or custodial care medical services.

A special payment policy for new physicians was first incorporated in OBRA 1987; it was subsequently expanded and modified by OBRA 1989 and OBRA 1990. Prior to January 1, 1992, these provisions applied to the calculation of payments under the reasonable charge payment system.

Defining geographic payment localities. Under the reasonable charge system, Medicare used 240 payment localities nationwide. These payment localities have been retained under the fee schedule except in three States (Nebraska, Oklahoma, and Minnesota) where physicians demonstrated overwhelming support for using statewide localities. There are currently 233 payment localities under the fee schedule.

OBRA 1989 required PhysPRC to conduct a study to determine the feasibility of using an alternative configuration, such as States or metropolitan statistical areas, for payment purposes under the fee schedule. PhysPRC recommended use of statewide fee schedule areas except in States with high intrastate price variation; in these States, up to five areas would be defined. DHHS is examining this and other recommendations. A change in the current locality structure would require a statutory change.

PAYMENT FOR CLINICAL LABORATORY SERVICES

Since 1984, payment for clinical laboratory services has been made on the basis of a fee schedule established on a regional, statewide or carrier service area basis. As a matter of practice, the Secretary has established fee schedules on a carrier service area basis. The law set the initial fee schedule payment amount for services performed in physicians' offices or independent laboratories at the 60th percentile of the prevailing charge level established for the fee screen year beginning July 1, 1984. Similarly, the initial fee schedule payment amount for services provided by hospital-based laboratories serving hospital outpatients was set at the 62nd percentile of the prevailing charge level. Subsequent amendments limited the percentage differential to "qualified hospitals." A qualified hospital is a sole community hospital (as that term is used for payment under Medicare's hospital prospective payment system) which provides some clinical diagnostic tests 24 hour a day in order to serve a hospital emergency room which is available to provide services 24 hours a day, 7 days a week.

The fee schedule payment amounts have been increased periodically since 1984 to account for inflation, though scheduled increases have in some instances been delayed and in one case did not occur. Allowable annual increases in 1991, 1992, and 1993 are limited to 2 percent.

Effective April 1, 1988, the law reduced the fee schedule amounts by 8.3 percent for certain automated tests and tests (except for cytopathology tests) that were subject to lowest charge level limits prior to implementation of the fee schedule. The reduced payment amounts serve as the basis for all future updates for these services.

Beginning in 1988, the law established *national ceilings* on payment amounts. Initially the ceiling was set at 115 percent of the median for all fee schedules established for that test. This percentage has been lowered several times. Beginning January 1, 1991, the level is set at 88 percent of the median of all fee schedules for that test.

Payment for clinical laboratory services (except for those provided by a rural health clinic) may only be made on the basis of assignment. The law specifically applies the assignment requirement

to clinical laboratory services provided in physicians offices. Payment for clinical laboratory services equals 100 percent of the fee schedule amount; no beneficiary cost-sharing is imposed.

Laboratories are required to meet the requirements of the Clinical Laboratory Improvement Act (CLIA). This legislation, which focuses on the quality and reliability of medical tests, was substantially revised in 1988 (CLIA 1988). CLIA 1988 strengthened Federal regulation of laboratories and expanded Federal oversight to virtually all laboratories in the country, including physicians office laboratories. Implementing regulations were issued February 28, 1992; technical and clarifying corrections were issued January 19, 1993.

HISTORICAL DATA

ASSIGNMENT RATE EXPERIENCE

The total number of assigned claims as a percentage of total claims received by medicare carriers for physicians and other medical services is known as the total assignment rate. Initially, the net assignment rate was computed in the same manner except that it omitted hospital-based physicians and group-practice prepayment plans which were considered assigned by definition (this distinction is no longer made). The net assignment rate declined until the mid-1970's when the rate leveled off at about 50 percent. Since 1985, the rate has increased significantly rising to 85.5 percent in 1992. This reflects both the impact of the participating physician program as well as the requirement that laboratory services must be paid on an assigned basis. Chart 1 and table 6 show the net assignment rates for fiscal years 1968-91.

CHART 1. NET ASSIGNMENT RATES (1969-92)

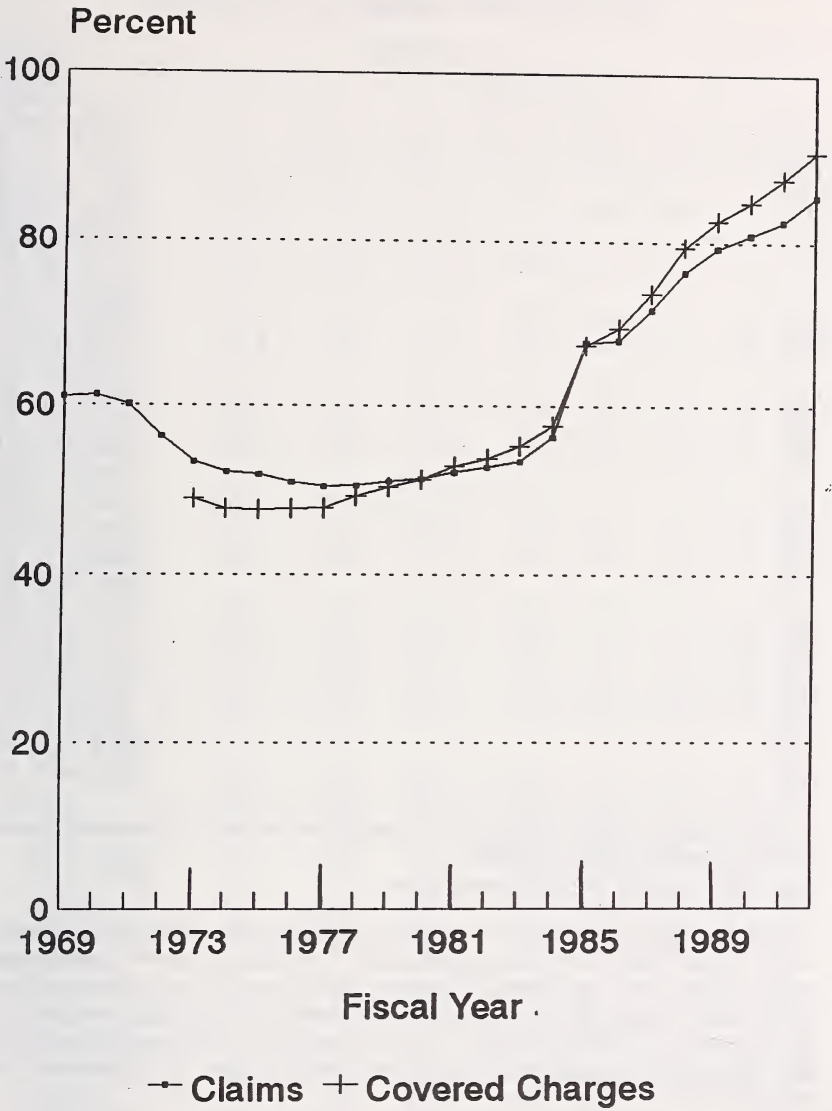


TABLE 6.—NET ASSIGNMENT RATES,¹ BY YEAR, 1969–92

[In percent]

Fiscal year	Claims	Covered Charges
1969.....	61.0	NA
1970.....	61.2	NA
1971.....	60.1	NA
1972.....	56.4	NA
1973.....	53.4	49.0
1974.....	52.2	47.8
1975.....	51.9	47.7
1976.....	51.0	47.8
1977.....	50.5	47.9
1978.....	50.6	49.3
1979.....	51.1	50.4
1980.....	51.4	51.3
1981.....	52.2	52.9
1982.....	52.8	53.8
1983.....	53.5	55.3
1984.....	56.4	57.7
1985.....	67.7	67.4
1986.....	68.0	69.5
1987.....	71.7	73.7
1988.....	76.3	79.4
1989.....	79.3	82.6
1990.....	80.9	84.8
1991.....	82.5	87.6
1992.....	85.5	90.8

¹ Both measures of assignment exclude claims from hospital-based physicians and group-practice prepayment plans that are considered assigned by definition.

Source: U.S. Department of Health and Human Services.

The statistics included in table 6 are program-wide data. Assignment rates also vary geographically. For example, the assignment rate (taken as a percent of dollars) for physician services in fiscal year 1992 ranged from a low of 40.1 percent in Idaho to a high of 99.7 percent in Rhode Island. The national average assignment rate for physicians services during this period was 89.4 percent (see table 7).

TABLE 7.—PHYSICIAN ASSIGNMENT RATES AS PERCENT OF COVERED CHARGES BY STATE, FISCAL YEARS 1985–1992

[In percent]

Census division/State	Fiscal year—							
	1985 ¹	1986 ²	1987 ³	1988 ⁴	1989	1990	1991	1992
National.....	65.5	66.4	70.8	77.0	80.6	83.0	86.1	89.4
New England:								
Maine.....	81.5	80.2	84.3	88.6	91.4	92.4	94.4	96.7
New Hampshire	56.5	55.0	58.3	64.3	67.8	69.9	80.8	89.4
Vermont.....	64.3	64.8	71.7	92.4	93.4	94.7	95.9	97.8
Massachusetts ⁵	93.7	96.0	98.2	99.1	99.3	99.5	99.5	99.6
Rhode Island	94.0	94.4	95.1	96.0	97.1	98.7	99.7	99.7
Connecticut	57.6	55.0	62.8	72.5	80.4	84.7	87.7	91.7
Middle Atlantic:								
New York.....	70.3	71.4	73.9	78.5	81.1	81.9	84.4	87.7
New Jersey.....	62.3	62.4	63.8	67.4	70.4	73.0	76.3	80.5
Pennsylvania	88.1	89.8	91.0	93.4	94.9	95.7	98.5	99.1
East North Central:								
Ohio.....	50.8	50.6	58.8	71.0	77.8	82.6	87.3	92.5
Indiana.....	49.6	54.5	59.2	69.2	74.7	77.2	81.5	85.7
Illinois.....	51.7	55.0	59.9	67.5	72.4	75.9	78.8	83.2
Michigan.....	88.2	88.1	89.7	92.2	93.6	94.5	94.4	95.9
Wisconsin.....	51.7	50.8	54.6	61.3	65.6	68.2	71.7	78.2
West North Central:								
Minnesota.....	30.6	31.7	39.9	44.2	46.1	47.6	52.3	57.1
Iowa.....	46.9	47.6	53.2	62.6	67.5	69.8	73.4	78.8
Missouri.....	50.1	53.4	61.2	68.9	72.3	74.9	78.5	83.7
North Dakota....	30.5	29.3	36.3	46.6	50.3	55.0	67.1	72.1
South Dakota	18.7	20.4	26.7	33.0	38.7	39.2	40.2	43.3
Nebraska.....	47.3	33.5	43.4	55.4	59.6	64.9	70.3	76.8
Kansas.....	72.7	73.7	78.7	84.6	87.2	88.8	91.9	94.5
South Atlantic:								
Delaware.....	81.8	79.8	81.9	84.6	88.1	90.5	92.9	95.2
Maryland.....	81.6	82.8	84.6	87.9	91.6	91.4	92.8	94.3
District of Columbia.....	78.1	78.6	80.5	84.6	86.5	87.5	89.4	92.1
Virginia.....	66.4	68.8	73.4	81.2	85.1	87.3	89.6	92.5
West Virginia....	66.7	69.6	76.9	85.2	90.3	93.2	95.5	97.2
North Carolina...	60.3	61.1	66.2	74.5	79.2	80.8	83.9	88.8
South Carolina...	64.9	70.2	75.4	82.4	85.8	87.1	88.9	91.6
Georgia.....	63.9	64.8	69.1	75.5	80.5	83.5	86.6	90.3
Florida.....	62.2	64.8	68.6	76.1	80.3	84.1	87.6	91.0
East South Central:								
Kentucky.....	50.3	54.2	63.5	75.2	80.8	84.8	88.8	91.9
Tennessee.....	55.6	58.1	65.5	74.8	80.9	84.0	89.5	93.1
Alabama.....	74.6	75.8	91.7	87.4	90.1	92.3	94.9	96.6
Mississippi.....	63.5	67.3	73.5	80.5	85.4	88.1	90.6	93.1

TABLE 7.—PHYSICIAN ASSIGNMENT RATES AS PERCENT OF COVERED CHARGES BY STATE, FISCAL YEARS 1985–1992—Continued

[In percent]

Census division/State	Fiscal year—							
	1985 ¹	1986 ²	1987 ³	1988 ⁴	1989	1990	1991	1992
West South Central:								
Arkansas	72.6	75.2	81.1	87.2	90.3	92.0	93.7	95.4
Louisiana	51.0	58.5	67.8	78.5	84.8	88.0	91.0	93.8
Oklahoma	39.0	39.8	48.6	58.5	66.0	68.2	72.8	77.8
Texas	63.0	61.1	67.2	74.2	78.0	79.9	83.0	87.4
Mountain:								
Montana	42.6	38.4	42.9	48.5	50.7	53.0	54.8	61.3
Idaho	25.2	24.8	26.4	30.0	33.7	36.1	40.2	40.1
Wyoming	33.8	32.1	30.4	36.7	40.2	43.9	48.9	57.5
Colorado	56.0	53.2	56.8	63.5	67.6	70.4	74.1	79.7
New Mexico	58.3	59.3	57.6	65.1	71.7	76.1	80.1	84.9
Arizona	52.8	51.2	57.1	66.6	72.0	76.2	80.3	84.4
Utah	63.1	61.4	69.4	74.1	79.9	80.4	83.1	88.4
Nevada	81.6	83.2	86.8	91.2	94.4	96.0	97.4	98.4
Pacific:								
Washington	45.5	47.9	46.6	46.4	50.8	54.8	60.8	69.2
Oregon	38.7	41.1	46.9	53.2	58.4	59.9	63.2	69.3
California	71.3	69.9	74.0	79.6	87.7	84.4	87.4	90.2
Alaska	54.4	55.9	64.3	73.9	78.5	79.6	83.2	89.1
Hawaii	61.2	64.5	72.0	76.8	80.7	82.9	85.8	93.1

¹ In instances in which carrier jurisdictions do not coincide with State boundaries, carrier rates were converted to State rates by calculating weights for the relevant counties based on their respective shares of total 1983 Medicare physician spending for physicians' services in the State and determining a weighted average rate. Rates reflect covered charges for physician claims processed during the period.

² The actual participation period was May through December 1986, and the participation agreements were in effect for that time.

³ The actual participation period is January 1987 through March 1988, and the participation agreements are in effect for that time.

⁴ The actual participation period is April 1988 through December 1988, and the participation agreements are in effect for that time.

⁵ Massachusetts enacted a Medicare mandatory assignment provision, effective April 1986. The fact that the assignment rates shown here are not 100 percent may be explained by the inclusion in the data base of billings by practitioners other than allopathic and osteopathic physicians, which are included in the Medicare statutory definition of "physician".

PARTICIPATING PHYSICIAN PROGRAM DATA

Physician participation rates have increased significantly since the inception of the program (see tables 8 and 9). For the calendar year 1992 participation period, the physician participation rate had risen to 52.2 percent accounting for 78.8 percent of covered charges for physician services during the period.

TABLE 8.—MEDICARE PHYSICIAN PARTICIPATION RATES: PERCENT OF PHYSICIANS WITH AGREEMENTS AND THEIR SHARE OF COVERED CHARGES

Participation period	Percent of physicians signing agreements	Participating physicians' covered charges as a percent of total ¹
October 1984–September 1985	30.4	36.0
October 1985–April 1986.....	28.4	36.3
April 1986–December 1986 ²	28.3	38.7
January 1987–March 1988	30.6	48.1
April 1988–December 1988	37.3	57.9
January 1989–March 1990.....	40.2	62.0
April 1990–December 1990	45.5	67.2
January 1991–December 1991	47.6	72.3
January 1992–December 1992	52.2	78.8

¹ Rates reflect covered charges for physician services processed during period.

² The actual participation period was May through December of 1986, and participation agreements were in effect for that time. However, charge data are generally collected by quarter; thus, the data for the last three quarters of 1986 are used as a proxy for the participation period.

Source: Health Care Financing Administration.

Table 10 shows the percentage of participating physicians and limited licensed practitioners as a percentage of total physicians and limited licensed practitioners for each State. The national average of participating physicians and limited licensed practitioners continues to increase. By the calendar year 1992 participation period, this percentage had risen to 52.2.

TABLE 9.—PARTICIPATION RATES AS PERCENTAGE OF PHYSICIANS, BY SPECIALTY, FOR SELECTED PARTICIPATION PERIODS

Specialty	Oct. 1985– Apr. 1986	May 1986– Dec. 1986	Jan. 1987– Mar. 1988	Apr. 1988– Dec. 1988	Jan. 1989– Mar. 1990	Apr. 1990– Dec. 1990	Jan. 1991– Dec. 1991	Jan. 1992– Dec. 1992
Physicians (M.D.s and D.O.s):								
General practice	27.3	23.6	25.6	32.3	35.8	39.7	44.0	48.0
General surgery	33.9	34.5	37.2	48.5	52.2	55.8	60.5	66.3
Otology, laryngology, rhinology	24.6	25.1	27.0	36.9	41.2	45.2	49.6	57.0
Anesthesiology	21.1	21.7	20.3	25.0	28.3	30.8	36.5	49.3
Cardiovascular disease	35.6	38.8	43.2	52.8	55.5	60.6	65.4	72.0
Dermatology	34.0	37.8	38.1	45.7	48.7	53.4	57.0	61.6
Family practice	25.5	27.1	27.1	35.6	39.7	47.2	50.8	57.7
Internal medicine	32.5	31.1	33.6	41.2	45.2	48.8	52.6	57.8
Neurology	34.8	33.2	39.2	44.1	49.2	53.1	56.1	63.8
Obstetrics-gynecology	29.1	30.5	31.5	40.4	44.2	48.8	52.6	58.0
Ophthalmology	27.3	28.7	35.1	46.3	50.5	55.6	60.0	66.1
Orthopedic surgery	29.0	38.3	32.6	44.0	49.2	53.7	58.4	65.5
Pathology	39.6	37.7	41.2	48.1	50.6	53.4	59.2	65.8
Psychiatry	30.0	27.8	28.6	34.4	37.8	41.6	44.1	48.8
Radiology	41.3	39.5	39.8	46.3	49.6	55.6	62.0	68.2
Urology	27.8	29.0	30.9	41.7	45.6	49.6	53.6	61.7
Nephrology	50.8	46.2	49.7	57.8	60.0	66.5	71.7	76.3
Clinic or other group practice—not GPPP	33.8	35.4	50.6	60.8	67.8	68.7	73.9	77.0
Other medical specialties	32.4	28.3	30.1	37.4	.....	.....	.....	.....
Other surgical specialties	18.2	12.7	14.8	15.9	.....	.....	.....	.....
Other physicians .....	.....	.....	.....	.....	.....	29.2	.....	35.9
Total physicians .....	.....	.....	.....	.....	.....	45.5	49.6	55.3

Limited license practitioners (LLP):

Chiropractor	25.4	23.8	19.7	22.9	24.8	26.2	28.6	31.4
Podiatry-surgical chiropody	38.2	31.8	33.4	44.6	52.6	54.0	59.6	64.2
Optometrist	44.0	48.2	44.1	50.5	48.9	54.0	56.9	59.0
Other limited license practitioners (audiologist, psychologist, physical therapist)	36.8	33.8	30.9	33.8	35.3	38.4	36.4	35.8
Certified registered midwife						15.2	23.8	40.7
Certified registered nurse anesthetist						12.5	26.3	31.3
Total limited license practitioners						40.0	40.0	41.0
Suppliers:								
Independent laboratory	28.4	36.3	37.2	42.0	20.1	45.4	49.7	52.4
Durable medical equipment suppliers	22.7	18.7	16.6	9.2	30.1	21.7	23.1	24.2
Ambulance service suppliers	28.6	38.6	27.9	30.0	43.8	32.1	32.3	34.4
Miscellaneous suppliers (orthotists, prosthetists, portable x ray suppliers)	22.5	22.9	15.5	16.8	17.5	17.5	17.7	18.2
Total supplies						21.8	22.6	23.7

Source: Health Care Financing Administration.

TABLE 10.—PHYSICIAN AND LIMITED LICENSED PRACTITIONERS PARTICIPATION RATES AS PERCENTAGE OF PHYSICIANS AND LIMITED LICENSED PRACTITIONERS, BY STATE AND PARTICIPATION PERIODS

State	Oct. 1985– Apr. 1986	May 1986– Dec. 1986	Jan. 1987– Mar. 1988	Apr. 1988– Dec. 1988	Jan. 1989– Mar. 1990	Apr. 1990– Dec. 1990	Jan. 1991– Dec. 1991	Jan. 1992– Dec. 1992
Alabama.....	58.2	63.0	68.8	73.5	75.9	74.6	82.7	83.4
Alaska.....	10.4	22.6	27.1	37.5	38.8	48.0	53.8	55.1
Arizona.....	15.4	18.5	28.1	38.7	41.2	53.5	61.3	64.5
Arkansas.....	45.2	34.7	42.0	50.9	53.1	53.9	59.9	57.8
California.....	30.0	39.7	38.9	48.5	54.0	57.7	60.8	62.6
Colorado.....	28.1	24.4	19.5	24.9	28.1	33.9	35.3	48.0
Connecticut.....	22.2	19.2	17.4	22.8	29.3	32.8	40.8	48.1
Delaware.....	23.9	29.7	31.2	37.4	37.5	42.5	43.9	51.9
District of Columbia.....	30.5	26.0	28.0	33.5	34.4	37.9	39.8	45.9
Florida.....	25.7	22.6	24.9	30.6	32.8	34.4	36.5	41.5
Georgia.....	33.1	27.9	25.8	32.5	49.7	49.5	53.6	57.2
Hawaii.....	20.6	41.7	47.8	53.7	53.7	56.8	57.3	64.1
Idaho.....	11.0	10.3	10.4	14.9	16.0	17.3	19.5	22.9
Illinois.....	23.1	21.8	26.7	36.4	40.0	42.3	46.9	50.8
Indiana.....	18.2	21.4	26.9	36.8	40.0	42.6	45.1	49.3
Iowa.....	29.7	38.2	25.1	43.7	45.3	48.1	51.9	58.8
Kansas.....	45.4	39.5	51.4	60.0	61.6	57.1	62.6	70.3
Kentucky.....	24.3	28.0	34.2	46.4	50.5	56.4	59.5	64.0
Louisiana.....	18.8	13.4	18.1	29.5	32.6	34.6	42.9	44.6
Maine.....	35.4	28.5	34.2	42.4	51.2	48.7	50.3	51.6
Maryland.....	30.4	28.5	30.1	38.5	42.8	45.9	45.3	58.7
Massachusetts.....	48.1	43.0	43.8	45.9	46.9	50.5	50.8	50.0
Michigan.....	44.0	37.1	32.7	38.3	41.7	44.7	53.7	51.7
Minnesota.....	18.5	20.7	22.4	25.4	25.4	27.5	29.3	34.4
Mississippi.....	19.1	22.8	23.6	30.1	33.4	38.0	42.7	47.9

Missouri.....	35.2	24.0	24.5	29.5	39.6	45.7	49.0	51.8
Montana.....	24.3	13.9	17.0	19.9	21.5	23.4	24.8	23.7
Nebraska.....	20.0	23.8	25.7	48.2	42.5	49.2	56.5	61.1
Nevada.....	21.7	26.8	33.5	46.0	57.0	69.8	72.9	75.4
New Hampshire.....	26.9	27.2	25.9	28.4	28.0	30.9	32.7	38.5
New Jersey.....	18.0	20.6	22.7	28.2	26.0	27.6	29.6	36.5
New Mexico.....	17.7	13.8	30.8	25.9	36.3	45.6	49.7	53.6
New York.....	20.8	19.9	24.1	28.4	29.8	30.4	34.6	36.9
North Carolina.....	39.1	34.3	31.4	40.7	54.2	52.9	58.1	68.2
North Dakota.....	10.9	13.8	20.5	30.8	31.7	42.2	43.9	45.8
Ohio.....	21.7	26.4	28.9	41.8	46.8	50.8	52.5	57.3
Oklahoma.....	13.8	16.6	20.8	27.9	31.6	36.4	39.0	44.4
Oregon.....	18.5	22.8	26.1	32.8	36.9	41.7	46.7	51.7
Pennsylvania.....	50.8	45.6	32.1	36.6	39.0	42.1	45.9	53.0
Rhode Island.....	46.7	48.1	50.8	55.0	58.8	67.0	67.8	70.3
South Carolina.....	17.9	16.8	25.3	37.6	42.1	55.5	57.9	63.0
South Dakota.....	8.0	6.9	12.7	17.6	20.0	19.6	20.6	23.7
Tennessee.....	21.1	37.4	43.4	54.9	57.6	58.4	63.7	67.6
Texas.....	19.7	14.1	19.4	26.0	28.9	36.4	38.9	52.9
Utah.....	29.3	36.1	42.2	50.4	54.7	65.1	65.6	69.5
Vermont.....	41.5	38.2	34.1	38.5	40.5	43.8	45.4	54.2
Virginia.....	29.6	29.5	33.6	39.1	40.9	46.0	48.1	49.7
Washington.....	23.6	21.8	26.9	35.4	31.4	34.7	46.1	53.1
West Virginia.....	22.9	33.0	37.5	53.2	59.1	63.2	66.3	68.4
Wisconsin.....	31.0	37.5	35.1	39.0	40.0	46.5	46.8	55.5
Wyoming.....	18.3	16.9	20.3	20.1	19.3	34.6	39.1	50.2
National.....	28.4	28.3	30.6	37.3	40.7	44.1	47.6	52.2

Source: Health Care Financing Administration.

Table 11 shows the allowed charges of participating physicians as a percent of total allowed charges, by State, for several participation periods. This percentage increased substantially, rising from 36 percent in the October 1984 to September 1985 period to 78.8 percent in the calendar 1992 participation period.

TABLE 11.—COVERED CHARGES OF PARTICIPATING PHYSICIANS AS A PERCENT OF TOTAL COVERED CHARGES—BY STATE AND PARTICIPATION PERIOD ¹

[In percent]

Census division/State	Oct. 1984– Sept. 1985	Apr. 1986– Dec. 1986 ²	Jan. 1987– Mar. 1988 ³	Apr. 1988– Dec. 1988 ⁴	Jan. 1989– Mar. 1990	Apr. 1990– Dec. 1990	Jan. 1991– Dec. 1991	Jan. 1992– Dec. 1992
National.....	36.0	39.1	48.1	57.9	62.0	67.2	72.3	78.8
New England:								
Maine.....	50.9	54.0	64.8	75.3	79.4	80.5	84.2	89.9
New Hampshire.....	40.1	32.7	36.0	40.7	42.8	46.2	68.3	80.7
Vermont.....	37.3	39.8	46.8	72.3	81.4	85.9	90.2	93.4
Massachusetts.....	70.7	80.2	89.1	93.9	95.4	95.0	96.7	96.3
Rhode Island.....	68.7	79.6	85.8	88.4	88.8	95.2	97.6	98.5
Connecticut.....	30.7	35.9	45.3	58.0	65.9	67.9	76.2	82.4
Middle Atlantic:								
New York.....	31.5	36.0	40.8	47.7	51.7	58.0	63.7	72.2
New Jersey.....	21.5	26.4	32.8	41.8	42.3	49.6	55.2	61.8
Pennsylvania.....	71.4	69.2	75.1	80.6	81.6	87.9	92.3	95.4
East North Central:								
Ohio.....	24.9	28.5	41.5	56.7	61.9	70.9	79.1	86.3
Indiana.....	18.9	31.1	43.3	56.7	60.6	65.2	70.2	80.9
Illinois.....	29.4	32.4	42.0	53.5	58.1	61.8	66.1	72.2
Michigan.....	55.4	48.2	71.9	82.0	85.6	86.0	86.5	92.0
Wisconsin.....	31.3	30.5	31.7	31.0	42.7	48.9	45.6	61.5

TABLE 11.—COVERED CHARGES OF PARTICIPATING PHYSICIANS AS A PERCENT OF TOTAL COVERED CHARGES—BY STATE AND PARTICIPATION PERIOD 1—
Continued

Census division/State	[In percent]							
	Oct. 1984– Sept. 1985	Apr. 1986– Dec. 1986 ²	Jan. 1987– Mar. 1988 ³	Apr. 1988– Dec. 1988 ⁴	Jan. 1989– Mar. 1990	Apr. 1990– Dec. 1990	Jan. 1991– Dec. 1991	Jan. 1992– Dec. 1992
West North Central:								
Minnesota	9.9	9.7	14.6	15.9	20.2	25.4	28.6	35.5
Iowa.....	28.5	30.5	41.0	50.0	54.2	57.8	61.9	71.0
Missouri.....	26.7	29.5	37.5	37.5	41.8	40.1	40.4	45.3
North Dakota.....	6.9	12.2	16.0	32.0	32.3	45.5	53.2	61.2
South Dakota.....	3.2	8.9	10.4	17.4	19.5	21.2	21.1	24.6
Nebraska.....	30.5	15.2	31.8	44.2	51.7	54.8	60.3	69.7
Kansas.....	48.0	41.7	NA	NA	82.5	82.3	86.8	91.3
South Atlantic:								
Delaware.....	57.0	54.9	58.5	67.1	70.8	76.6	81.7	87.2
Maryland.....	57.8	61.3	67.4	77.5	80.4	83.3	85.6	86.4
District of Columbia	60.3	60.8	66.6	71.7	73.9	76.8	80.8	85.4
Virginia.....	31.0	40.5	53.0	63.6	69.5	71.2	78.4	84.1
West Virginia.....	34.5	47.2	59.3	73.3	77.5	80.6	85.2	90.0
North Carolina.....	34.4	36.5	44.9	54.2	55.2	63.9	68.3	82.4
South Carolina.....	29.9	40.8	55.2	64.7	68.5	67.6	71.6	79.3
Georgia.....	29.3	35.1	43.0	54.3	50.7	65.9	74.9	82.8
Florida.....	30.0	34.1	41.9	55.2	61.6	68.8	74.9	81.8
East South Central:								
Kentucky.....	22.3	26.3	44.7	59.0	64.3	72.6	76.9	84.3
Tennessee.....	25.1	26.7	41.3	56.6	57.4	68.5	76.8	86.8
Alabama.....	42.5	58.6	66.9	76.9	81.3	84.9	88.5	91.7
Mississippi.....	14.3	31.0	44.9	59.0	65.3	68.3	73.9	82.1

West South Central:

Arkansas.....	47.9	53.6	68.3	76.6	81.0	84.5	86.5	90.0
Louisiana.....	16.2	32.9	48.2	63.7	71.0	76.7	81.2	86.6
Oklahoma.....	16.6	16.2	24.9	37.6	39.1	50.0	57.7	62.8
Texas.....	26.2	28.1	38.9	48.0	52.5	56.9	63.6	72.6
Mountain:								
Montana.....	25.6	20.1	23.8	27.4	29.9	29.7	34.1	42.7
Idaho.....	8.6	8.9	9.3	12.1	13.2	17.5	21.1	23.5
Wyoming.....	15.7	11.6	14.1	18.2	19.7	25.8	31.9	44.1
Colorado.....	23.5	28.9	34.0	42.7	47.7	50.5	55.9	63.5
New Mexico.....	34.1	30.6	28.1	36.8	39.5	51.1	57.8	64.9
Arizona.....	32.7	27.4	38.3	51.9	49.8	60.2	67.8	75.2
Utah.....	43.8	44.8	58.4	62.5	68.9	65.1	75.1	81.8
Nevada.....	41.5	58.0	63.4	72.9	69.9	82.1	87.5	92.3

Pacific:

Washington.....	17.5	24.3	20.2	23.8	26.9	31.8	37.9	45.2
Oregon.....	17.3	18.7	25.5	35.4	34.8	43.3	50.7	59.8
California.....	42.2	42.5	50.2	62.0	67.2	71.2	75.6	80.0
Alaska.....	17.2	24.9	34.3	44.8	50.0	49.3	58.0	70.9
Hawaii.....	39.7	43.5	53.5	61.7	58.6	70.1	74.3	84.7

¹ In instances in which carrier jurisdictions do not coincide with State boundaries, carrier rates were converted to state rates by calculating weights for the relevant counties based on their respective shares of total 1983 Medicare physician spending for physicians' services in the state and determining a weighted average rate. Rates reflect covered charges for physicians claims processed during the period.

² The actual participation period was May through December 1986, and the participation agreements were in effect for that time.

³ The actual participation period is January 1987 through March 1988, and the participation agreements are in effect for that time.

⁴ The actual participation period is April 1988 through December 1988 and the participation agreements are in effect for that time.

PARTICIPATION, ASSIGNMENT, AND REASONABLE CHARGE REDUCTIONS

Historically the difference between the physician's billed charge and Medicare's approved or reasonable charge was referred to as the reasonable charge reduction. Beginning in 1992, with implementation of the fee schedule, the term reasonable charge reduction no longer applies. Instead, the term charge reduction refers to the difference between the physicians' billed charge and the fee schedule amount. Reasonable charge reductions were made on 85.5 percent of unassigned claims in fiscal year 1992. The average amount of the reduction was 19.7 percent of billed charges, or \$18 per approved claim. Beneficiaries were liable for these reduction amounts, although it is not known how often physicians actually collected from beneficiaries. The total reduced on all unassigned claims was \$1,317 million in fiscal year 1992.

Through 1984, approximately the same proportions of assigned and unassigned claims were reduced (see table 12), and were reduced by similar proportions and amounts. From 1984 to 1992, the proportions of assigned and unassigned claims reduced remained about the same, but the percentage and amounts of the reductions diverged. The percent and dollar reductions on assigned claims continued to increase while the percent and dollar reductions of unassigned claims decreased. This pattern was due to the imposition of limits on the actual charges of nonparticipating physicians. That is, the MAAC limits, and the new balance billing limits beginning in 1991, limited the rate of increase in prices for unassigned services relative to the overall increase in reasonable charges. The substantial growth in the overall percentage of services billed on an assigned basis also may have contributed to this pattern.

As a result, total beneficiary liability for charge reductions on unassigned claims fell. Total liability peaked in 1985 at \$2,812.7 million, and declined to \$1,317 million by 1992.

TABLE 12.—REASONABLE CHARGE REDUCTIONS FOR MEDICARE PART B (EXCLUDES CLAIMS FROM HOSPITAL-BASED PHYSICIANS AND GROUP-PRACTICE PREPAYMENT PLANS) FOR ASSIGNED AND NOT ASSIGNED CLAIMS, FISCAL YEARS 1975, 1980, AND 1985–1992

	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992
Percentage of claims reduced:										
Assigned	68.3	80.0	81.7	82.5	83.0	85.5	86.3	87.6	86.7	87.0
Not assigned	75.6	83.7	84.6	84.9	82.5	85.7	89.2	90.3	90.7	85.5
Percentage reduction in charges for covered services:										
Assigned	16.4	22.5	27.0	28.4	27.9	29.3	30.9	32.6	35.2	39.1
Not assigned	16.6	22.3	25.6	26.6	25.5	24.7	25.2	25.3	24.0	19.7
Amount reduced per approved claim:										
Assigned	\$11.13	\$21.81	\$33.19	\$36.43	\$36.98	\$39.97	\$43.72	\$48.22	\$54.20	63.6
Not assigned	\$13.45	\$21.96	\$33.12	\$33.15	\$31.44	\$29.47	\$29.67	\$28.97	\$24.84	18.0
Amount reduced on claims not assigned (in millions) ..	\$450.1	\$1,454.0	\$2,571.9	\$2,812.5	\$2,677.8	\$2,312.6	\$2,213.7	\$2,198.0	\$1,948.5	\$1,317.0

Source: Department of Health and Human Services, Health Care Financing Administration.

The impact of charge reductions on unassigned claims was spread unevenly across the population. Calendar 1992 data show an 18.4 percent national average reduction on unassigned claims (see table 13). Beneficiary liability for these charge reductions ranged from a high of \$145.5 million in New York to a low of \$0.3 million in Rhode Island.

TABLE 13.—CHARGE REDUCTIONS FOR UNASSIGNED CLAIMS, BY STATE,¹ JANUARY–DECEMBER, 1992

[Dollar amounts in millions]

Census division/State	Covered charges ²		Percent reduction in unassigned charges	Amount reduced, unassigned charges ²
	Total	Unassign		
National.....	\$70,338.1	\$6,061.4	18.4	\$1,113.6
New England:				
Maine.....	304.6	8.2	18.5	1.5
New Hampshire.....	230.5	20.6	19.3	4.0
Vermont.....	111.9	2.5	20.5	.5
Massachusetts ³	2,148.8	10.1	26.0	2.6
Rhode Island.....	355.8	2.0	16.7	.3
Connecticut.....	1,146.2	74.6	18.8	14.1
Middle Atlantic:				
New York.....	5,899.2	630.6	22.5	145.5
New Jersey.....	2,647.2	403.3	20.1	81.2
Pennsylvania.....	5,277.7	41.5	16.1	6.7
East North Central:				
Ohio.....	3,091.5	190.1	19.4	36.9
Indiana.....	1,291.8	139.0	19.4	26.9
Illinois.....	2,715.2	383.7	19.1	73.5
Michigan.....	2,948.4	97.1	20.9	20.3
Wisconsin.....	1,040.7	195.1	6.2	12.1
West North Central:				
Minnesota.....	677.2	251.1	19.3	48.9
Iowa.....	605.4	113.4	18.1	20.5
Missouri.....	1,616.2	186.4	7.1	13.3
North Dakota.....	181.5	44.6	19.7	8.8
South Dakota.....	149.5	69.4	19.4	13.5
Nebraska.....	324.7	68.9	18.6	12.8
Kansas.....	476.1	25.0	17.0	4.3
South Atlantic:				
Delaware.....	213.1	8.3	17.8	1.5
Maryland.....	1,521.6	70.3	21.8	15.3
District of Columbia.....	406.5	25.8	21.7	5.6
Virginia.....	1,284.6	84.8	19.5	16.5
West Virginia.....	508.8	12.0	19.8	2.4
North Carolina.....	1,848.6	129.0	19.9	25.7
South Carolina.....	715.8	51.2	19.2	9.8
Georgia.....	1,659.9	125.3	19.2	24.0
Florida.....	6,537.7	452.4	19.7	89.1

TABLE 13.—CHARGE REDUCTIONS FOR UNASSIGNED CLAIMS, BY STATE,¹ JANUARY–DECEMBER, 1992—Continued

[Dollar amounts in millions]

Census division/State	Covered charges ²		Percent reduction in unassigned charges	Amount reduced, unassigned charges ²
	Total	Unassign		
East South Central:				
Kentucky	1,009.9	58.8	19.2	11.3
Tennessee.....	1,452.8	70.9	20.1	14.2
Alabama	1,247.7	35.1	20.8	7.3
Mississippi.....	592.1	33.0	21.6	7.1
West South Central:				
Arkansas	734.2	29.5	18.5	5.5
Louisiana	1,243.1	63.7	19.4	12.4
Oklahoma	678.8	120.3	19.2	23.1
Texas	3,796.8	382.9	15.1	57.7
Mountain:				
Montana	145.6	45.6	20.0	9.1
Idaho	133.0	65.1	19.4	12.6
Wyoming	45.6	14.7	19.5	2.9
Colorado	532.4	81.4	9.3	7.6
New Mexico	238.9	26.4	19.1	5.0
Arizona.....	1,027.6	132.4	18.3	24.3
Utah.....	233.2	24.4	20.1	4.9
Nevada.....	429.7	6.2	20.5	1.3
Pacific:				
Washington	939.7	216.6	6.9	15.0
Oregon	518.5	132.2	17.8	23.5
California.....	7,160.5	590.7	21.6	127.4
Alaska	40.9	3.3	20.0	.7
Hawaii.....	201.1	11.9	21.7	2.6

¹ In instances in which carrier jurisdictions do not coincide with State boundaries, carrier rates were converted to State rates by calculating weights for the relevant counties based on their respective shares of total 1983 Medicare physician spending for physicians' services in the State and determining a weighted average rate. Rates reflect covered charges for physician claims processed during the period. National data exclude data for Puerto Rico, the Virgin Islands, the Railroad Retirement Board, and Parenteral and Enteral Claims. As a result of report changes effective April 1, 1992, charge reductions include: reasonable charge medical necessity and global fee/rebundling.

² Amounts in millions.

³ Massachusetts enacted a Medicare mandatory assignment provision, effective April 1986. The fact that the assignment rates shown here are not 100 percent may be explained by the inclusion in the database of billings by practitioners other than allopathic and osteopathic physicians, which are included in the Medicare statutory definition of "physician".

TABLE 14.—DISTRIBUTION OF COVERED CHARGES FOR SERVICES BILLED, BY PARTICIPATION STATUS OF PHYSICIAN AND ASSIGNMENT STATUS OF CLAIM ¹

[In percent]

Time period	Total	Partici- pants	Nonparticipants	
			Assigned	Unassigned
Oct. 1984–Sept. 1985	100.0	36.0	29.5	34.5
Oct. 1985–Mar. 1986	100.0	36.3	29.4	34.3
Apr. 1986–Dec. 1986 ²	100.0	39.1	28.0	32.9
Jan. 1987–Mar. 1988 ³	100.0	48.1	25.2	26.7
Apr. 1988–Dec. 1988	100.0	57.9	21.0	21.1
Jan. 1989–Mar. 1990	100.0	62.0	19.0	18.5
Apr. 1990–Dec. 1990	100.0	67.2	16.7	16.1
Jan. 1991–Dec. 1991	100.0	72.3	14.6	13.1
Jan. 1992–Dec. 1992	100.0	78.8	11.6	9.7

¹ Rates reflect covered charges for physician claims processed during the period. Data for up to seven carriers missing from various quarters.

² The actual participation period was May through December 1986, and the participation agreements were in effect for that time.

³ The actual participation period is January 1987 through March 1988, and the participation agreements are in effect for that time.

TABLE 15.—DISTRIBUTION OF COVERED CHARGES FOR SERVICES BILLED, BY PARTICIPATION STATUS OF PHYSICIAN AND ASSIGNMENT STATUS OF CLAIM, BY STATE, JANUARY–DECEMBER 1992 ¹

[In percent]

Census division/State	Total	Participating physician	Nonparticipating physician	
			Assigned	Unassigned
National.....	100.0	78.8	11.6	9.7
New England:				
Maine.....	100.0	89.9	7.3	2.8
New Hampshire.....	100.0	80.7	10.1	9.2
Vermont.....	100.0	93.4	4.6	2.0
Massachusetts.....	100.0	96.3	3.3	0.4
Rhode Island.....	100.0	98.5	1.3	0.3
Connecticut.....	100.0	82.4	10.2	7.4
Middle Atlantic:				
New York.....	100.0	72.2	16.3	11.4
New Jersey.....	100.0	61.8	19.5	18.8
Pennsylvania.....	100.0	95.4	3.8	0.7
East North Central:				
Ohio.....	100.0	86.3	7.2	6.5
Indiana.....	100.0	80.9	7.3	11.8
Illinois.....	100.0	72.2	12.1	15.8
Michigan.....	100.0	92.0	4.5	3.5
Wisconsin.....	100.0	61.5	18.4	20.1
West North Central:				
Minnesota.....	100.0	35.5	23.1	41.4
Iowa.....	100.0	71.0	9.3	19.8
Missouri.....	100.0	45.3	40.1	14.7
North Dakota.....	100.0	61.2	12.2	26.5
South Dakota.....	100.0	24.6	20.0	55.4
Nebraska.....	100.0	69.7	8.2	22.1
Kansas.....	100.0	91.3	3.3	5.2
South Atlantic:				
Delaware.....	100.0	87.2	8.6	4.2
Maryland.....	100.0	86.4	8.2	5.2
District of Columbia.....	100.0	85.4	7.3	7.3
Virginia.....	100.0	84.1	9.1	6.9
West Virginia.....	100.0	90.0	7.5	2.4
North Carolina.....	100.0	82.4	8.5	9.1
South Carolina.....	100.0	79.3	12.9	7.8
Georgia.....	100.0	82.8	8.2	9.0
Florida.....	100.0	81.8	9.9	8.3
East South Central:				
Kentucky.....	100.0	84.3	8.5	7.2
Tennessee.....	100.0	86.8	7.6	5.6
Alabama.....	100.0	91.7	5.3	3.1
Mississippi.....	100.0	82.1	11.7	6.2
West South Central:				
Arkansas.....	100.0	90.0	5.7	4.4
Louisiana.....	100.0	86.6	7.6	5.8

TABLE 15.—DISTRIBUTION OF COVERED CHARGES FOR SERVICES BILLED, BY PARTICIPATION STATUS OF PHYSICIAN AND ASSIGNMENT STATUS OF CLAIM, BY STATE, JANUARY–DECEMBER 1992 ¹—Continued

[In percent]

Census division/State	Total	Participating physician	Nonparticipating physician	
			Assigned	Unassigned
Oklahoma	100.0	62.8	16.4	20.9
Texas	100.0	72.6	15.7	11.7
Mountain:				
Montana	100.0	42.7	21.0	36.3
Idaho	100.0	23.5	18.7	57.8
Wyoming	100.0	44.1	15.9	40.0
Colorado	100.0	63.5	17.6	18.9
New Mexico	100.0	64.9	21.2	13.9
Arizona	100.0	75.2	10.2	14.7
Utah	100.0	81.8	7.4	10.8
Nevada	100.0	92.3	6.4	1.3
Pacific:				
Washington	100.0	45.2	25.1	29.7
Oregon	100.0	59.8	11.3	28.9
California	100.0	80.0	11.0	9.1
Alaska	100.0	70.9	19.8	9.3
Hawaii	100.0	84.7	9.2	6.1

¹ In instances in which carrier jurisdictions do not coincide with State boundaries, carrier rates were converted to State rates by calculating weights for the relevant counties based on their respective shares of total 1983 Medicare physician spending for physicians' services in the State and determining a weighted average rate. Rates reflect covered charges for physicians claims processed during the period.

The changing pattern of charge reductions reflects, in part, overall changes in participation and assignment rates. As shown in table 14, participating physicians accounted for a growing share of total physician charges. During the first participation period (fiscal year 1985), participating physicians (30.4 percent of all physicians) accounted for 36.0 percent of all physician charges. In 1992, the proportion of physicians participating grew to 52.2 percent, and accounted for 78.8 percent of all physician charges. Total covered charges represented by unassigned claims declined from 34.5 percent to 9.7 percent over the same period. The proportion of charges billed by participation and assignment status varies by State; these data are shown in table 15.

DISTRIBUTION OF PHYSICIAN SERVICES

Tables 16–24 show the distribution of reasonable charges for physicians services for calendar year 1991. These tables do not reflect the distributional shifts that are anticipated with the implementation of the fee schedule in 1992. As noted earlier, payments to family practitioners and general practitioners are expected to increase compared to what they would have been under the old reasonable charge payment system. Alternatively, payments to sur-

geons and certain other procedure-oriented specialties are expected to decline compared to what they would have been if the old system remained in place. These specialty-specific increases and reductions are expected to be reflected in an overall distributional shift in payments. These shifts are expected to become more pronounced with full implementation of the fee schedule in 1996.

The calendar year 1991 data will provide a basis for comparing actual experience under the fee schedule with experience under the old system. The 1991 data are tabulations from the 1991 Part B Medicare Annual Data Procedure file, which is a summary of all claims filed with the Medicare carriers.

The totals shown will differ from total SMI outlay figures for 1991 shown in the budget for several reasons:

The amounts shown in these tables are allowed amounts, rather than reimbursements—that is, they include both Medicare's and the enrollee's share of reasonable charges.

The amounts shown are for services rendered during calendar year 1991; budget figures are for payments made during the fiscal year regardless of when the services were rendered.

The amounts shown are only for services reimbursed by carriers under the reasonable charge system; hence, they do not include Part B payments to hospital outpatient departments or to risk-based prepaid medical plans.

Further, the amounts shown underestimate what they are supposed to represent by a small amount because some claims for services rendered in 1991 had not been processed by carriers at the time the 1991 files were submitted to HCFA, and because some claims recorded had to be eliminated due to recording errors.

Table 16 illustrates that in 1991, 79.5 percent of allowed amounts under the reasonable charge system were for physicians' services, and another 3.0 percent were for the services of limited license practitioners—psychologists, podiatrists, optometrists, audiologists, chiropractors, dentists, and physical therapists. About 4.3 percent went to independent laboratories in 1991, while 13.2 percent went to suppliers of medical equipment, prosthetics, and ambulance services.

TABLE 16.—ALLOWED AMOUNTS FOR CPR CLAIMS, BY TYPE OF PROVIDER, 1991

Type of provider	Allowed amounts (millions)	Percent of total	Percent inpatient
Physicians	\$33,556	79.5	41.4
Limited license practitioners ¹	1,259	3.0	2.0
Laboratories.....	1,830	4.3	0.2
Medical suppliers ²	5,556	13.2	5.1
All providers ³	42,200	100.0	33.7

¹ Includes psychology, podiatry, optometry, audiology, chiropractice, dentistry, and physical therapy.

² Includes suppliers of medical equipment, prosthetics, and ambulance services.

³ Total does not include charges for hospital outpatient department facility fees or for risk-based prepaid medical plans since these are not reimbursed under the CPR system.

Source: HCFA, Bureau of Data Management and Strategy, Data from the Part B Medicare Annual Data System.

Almost 34 percent of all reasonable charge allowed amounts were for hospital inpatient services, and almost 42 percent of allowed amounts for physicians' services were inpatient. The share of physicians' services that are inpatient has dropped in recent years, from nearly 64 percent in 1981.

Table 17 shows the distribution of spending for physicians' services by specialty. (It excludes limited license practitioners, labs, and suppliers.) In 1991, generalists accounted for 31.0 percent of spending, nonsurgical specialists for 20.6 percent, and surgical specialists for 33.5 percent. Radiologists, anesthesiologists, and pathologists (RAPs) together accounted for 14.5 percent of allowed amounts. Osteopathic physicians accounted for less than 1 percent of total allowed amounts for physicians' services.

The major physician specialties treating the Medicare population, in descending order of importance as measured by total allowed amounts, were general internists (17.3 percent of allowed amounts), ophthalmologists (11.6 percent), radiologists (9.3 percent), cardiologists (8.6 percent) and general surgeons (6.4 percent).

The share of services provided on an inpatient basis varied by specialty, generally increasing with specialization. About 33.4 percent of the services of generalists were inpatient in 1991. The inpatient share for nonsurgical specialists was 51.8 percent and 41.8 percent for surgical specialists.

TABLE 17.—ALLOWED AMOUNTS FOR PHYSICIANS' SERVICES, BY PHYSICIAN SPECIALTY,
1991

Specialty	Allowed amounts (millions)	Percent of total	Percent inpatient
Generalists:			
General practice	\$1,204	3.6	18.1
Family practice	1,770	5.3	24.9
Internal medicine	5,821	17.3	38.7
Pediatrics	27	.1	25.7
Clinics	1,575	4.7	35.5
All generalists	10,398	31.0	33.4
Nonsurgical specialists:			
Allergy	61	.2	6.5
Cardiology	2,882	8.6	61.7
Dermatology	671	2.0	1.7
Gastroenterology	912	2.7	46.2
Neurology	480	1.4	50.6
Psychiatry	641	1.9	51.9
Physical medicine	181	.5	62.1
Pulmonary disease	583	1.7	70.0
Geriatrics	21	.1	32.8
Nephrology	463	1.4	54.5
All nonsurgical specialists	6,896	20.6	51.8
Surgical specialists:			
General surgery	2,131	6.4	68.5
Otolaryngology	394	1.2	19.2
Neurosurgery	301	.9	85.2
Gynecology	257	.8	44.9
Ophthalmology	3,899	11.6	4.8
Orthopedic surgery	1,697	5.1	62.6
Plastic surgery	179	.5	34.2
Colon and rectal surgery	65	.2	34.8
Thoracic surgery	979	2.9	90.2
Urology	1,319	3.9	43.4
Hand surgery	12	(¹)	24.8
All surgical specialists	11,231	33.5	41.8
Radiology	3,111	9.3	30.2
Anesthesiology	1,286	3.8	73.2
Pathology	470	1.4	49.5
Osteopathy	164	.5	21.2
Total—all physicians	33,556	100.0	41.4

¹ Less than 0.05 percent.

Source: HCFA, Bureau of Data Management and Strategy, Data from the part B Medicare Annual Data System.

Table 18 shows the distribution of spending for physicians' services by type of service. About 34.9 percent of spending was for medical care (nonsurgical) in 1991. About 37.7 percent of spending was for surgical procedures in total, adding together the amounts for surgeons, assistant surgeons, and anesthesiologists. About 11 percent was for diagnostic laboratory tests, which would include not only blood chemistry analysis and urinalysis, but also tests such as EKGs. Over 10 percent of spending was for radiology, and almost 4 percent was for consultations.

TABLE 18.—ALLOWED AMOUNTS FOR PHYSICIANS' SERVICES, BY TYPE OF SERVICE, 1991

Type of service	Allowed amounts (millions)	Percent of total	Percent inpatient
Medical care.....	\$11,718	34.9	37.8
Surgery	11,245	33.5	51.7
Assistance at surgery	265	0.8	89.5
Anesthesia.....	1,144	3.4	73.5
Diagnostic laboratory tests	3,698	11.0	22.5
Diagnostic radiology	2,896	8.6	29.5
Therapeutic radiology.....	624	1.9	6.6
Consultations ¹	1,237	3.7	66.4
Other ²	730	2.2	3.8
All services	33,556	100.0	41.4

¹ Includes first and second opinions for surgery.

² Includes treatment for renal patients, pneumococcal vaccine, and medical supplies, among other things.

Source: HCFA. Bureau of Data Management and Strategy, Data from the Part B Annual Data System.

Table 19 lists the top 20 individual services, ranked by total allowed amounts on claims submitted by selected physicians for 1991. The most important exclusion is amounts for the services of anesthesiologists, since there would typically be a charge for anesthesiology for the surgical procedures. The amounts for surgical procedures include claims by both the primary surgeon and any assistant surgeons, but not the amounts for anesthesiologists.

The top 20 services (out of more than 7,000) accounted for 36.2 percent of all spending for all physicians' services in 1991. Cataract extraction with implantation of an intraocular lens was the top-ranked procedure, accounting by itself for 5.9 percent of total allowed amounts for physicians' services. Other surgical procedures in the top 20 included transurethral resections of the prostate (TURP), and total knee replacement. The remaining services in the top 20 were either visits, consultations, or EKGs.

Table 20 presents total allowed amounts for selected groups of generic services, and shows the percent of total allowed amounts for all physicians' services accounted for by each group. As in table 19, certain physicians' services—most notably for anesthesiologists—are not included in the allowed amounts for each service group. No attempt was made to define and rank all possible service groups, so that there may be other important service groups that

do not appear in the table. For example, diagnostic radiology accounts for 8.6 percent of allowed amounts for physicians' services (from table 18), but radiological services do not appear in table 20.

TABLE 19.—THE TOP 20 SERVICES BILLED BY PHYSICIANS UNDER MEDICARE, 1991

Service code and description	Allowed amounts (millions) ¹	Percent of total
Top 20 services:		
66984—Cataract.....	\$1,985	5.9
90060—Office visit, intermediate.....	1,636	4.9
90050—Office visit, limited.....	1,457	4.3
90260—Hospital visit, intermediate.....	1,037	3.1
90250—Hospital visit, limited.....	898	2.7
90620—Consultation, comprehensive.....	712	2.1
90220—Initial hospital visit, comprehensive.....	520	1.5
90070—Office visit, extended.....	425	1.3
93307—Echo cardiography.....	411	1.2
66821—Lasering, secondary cataract.....	377	1.1
93000—EKG (12 leads).....	325	1.0
90270—Hospital visit, extended.....	321	1.0
90080—Office visit, comprehensive.....	307	.9
90040—Office visit, brief.....	279	.8
92014—Eye exam, established patient.....	276	.8
27447—Total knee replacement.....	268	.8
90020—Office visit, comprehensive, new patient.....	262	.8
93010—EKG, interpretation and report only.....	238	.7
52601—TURP.....	216	.6
45378—Diagnostic colonoscopy.....	210	.6
Total.....	12,160	36.2

¹ Amounts for surgical procedures include fees for primary and assistant surgeons, but not for anesthesiologists.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy. Data from the Part B Medicare Annual Data System.

The 21 service groups shown in table 20 accounted for 43.5 percent of all allowed amounts for all physicians' services in 1991. The single most costly group was office visits (accounting for 14 percent of total allowed amounts for physicians' services), followed by hospital visits (9.6 percent). Cataract surgery of all types accounted for more than 6 percent of total allowed amounts for physicians' services. EKGs accounted for 2 percent of total allowed amounts when all codes for the procedure are considered. It should also be noted that the amount for hemodialysis includes only physician services and does not include the much larger amounts for the facility charges for hemodialysis that were not billed under the fee-for-service reimbursement system.

TABLE 20.—ALLOWED AMOUNTS FOR SELECTED GROUPS OF PHYSICIANS' SERVICES, 1991

Service group	1991	
	Allowed amounts (millions) ¹	Percent of total
Hospital visits (90200-90282)	\$3,227	9.6
Office visits (90000-90080)	4,713	14.0
Cataract surgery (66830-66985)	2,043	6.1
EKGs (93000-93015, 93258-93366, 99150, 99151)	696	2.1
Transurethral surgery (52601)	216	.6
Coronary artery bypass (33510-33528)	545	1.6
Hip arthroplasty (27130-27132)	162	.5
Cardiac catheterization (93501-93562)	603	1.8
Colonoscopy (45378-45385, 44388-44393, 45355)	513	1.5
Hemodialysis/CAPD (90941-90958)	19	.1
Thromboendarterectomy 35301-35381)	109	.3
Knee arthroplasty (27446, 27447, 29881)	303	.9
Pacemaker implant/removal (33200-33210, 33232)	103	.3
Vein bypass (35501-35587)	79	.2
Emergency room visits (90500-90580)	607	1.8
SNF visits (90300-90370)	293	.9
Nursing home visits (90400-90470)	152	.5
Home visits (90100-90170)	65	.2
Prostatectomy (55801-55845)	72	.2
EEGs (95819-95851, 99150-99151)	40	.1
Pacemaker tests (93731-93736)	48	.1
Total	14,609	43.5

¹ Amounts for surgical procedures include fees for primary and assistant surgeons, but not for anesthesiologists.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy. Data from the Part B Medicare Annual Data System.

In recent years, there have been many changes in the delivery of health care services. Some of the more significant changes affecting Medicare services have been in the delivery of surgical services. First, there has been significant growth in the amount of surgical care provided by some specialties. Second, there has been a dramatic shift in the place of surgical care; that is, surgical care is now frequently provided in outpatient settings whereas previously, most surgical care was provided in inpatient settings.

As shown in table 21, the most significant shift in site of surgical care between 1980 and 1991 was out of inpatient settings and into other settings. Outpatient hospital settings benefited most from this shift, growing from only 3.3 percent of all surgical charges in 1980 to 25.4 percent in 1991. The proportions of surgery taking place in a physician's office and in other nonhospital settings also grew somewhat. In 1991 the proportion of all surgical care provided in inpatient settings had dropped to 49.6 percent.

TABLE 21.—CHARGES SUBMITTED TO MEDICARE FOR ALL PHYSICIAN SURGICAL SERVICES, BY PLACE OF SERVICE, 1980, 1989, 1990 AND 1991

Place of service	Surgical charges ¹		
	Amount in millions	Percent of surgical charges	As percent of total settings charges
1980:			
Total	\$3,828	100.0	31.8
Office	445	11.6	12.2
Outpatient hospital	129	3.3	29.5
Inpatient hospital	3,231	84.4	44.1
Other ²	23	.6	3.7
1989:			
Total	10,280	100.0	34.0
Office	1,768	17.2	16.4
Outpatient hospital ¹	2,646	25.7	55.1
Inpatient hospital	5,345	52.0	41.0
ASC	416	4.0	52.1
Other ²	105	1.0	13.3
1990:			
Total	11,048	100.0	33.3
Office	2,004	18.1	16.2
Outpatient hospital ¹	2,867	26.0	54.3
Inpatient hospital	5,563	50.4	40.6
ASC	488	4.4	51.2
Other ²	127	1.1	14.5
1991:			
Total	11,773	100.0	32.9
Office	2,230	18.9	16.1
Outpatient hospital ¹	2,993	25.4	52.5
Inpatient hospital	5,834	49.6	41.1
ASC	514	4.4	54.2
Other ²	201	1.7	18.9

¹ May include some services rendered in an ASC.

² Includes homes, nursing homes, and other places of service.

Source: Health Care Financial Administration, Bureau of Data Management and Strategy, part B Carrier Statistical System.

Table 22 shows the percent of total surgical charges by specialty in 1980 and 1991. In 1980, three specialties (ophthalmology, general surgery, and orthopedic surgery) accounted for nearly half of all Medicare surgical care. These same three specialties accounted for nearly the same proportion of total surgical care in 1991, but the shares among these specialties changed. While ophthalmologists accounted for only 13.6 percent in 1980, by 1991 their share had increased to 23.4 percent due primarily to the substantial growth in

cataract surgery during the 1980s. For three specialties (ophthalmology, gastroenterology, and otology, laryngology and rhinology or ENT), surgical care represented much larger proportions of their total Medicare practice in 1991 than in 1980.

TABLE 22.—SUBMITTED SURGICAL CHARGES UNDER MEDICARE AS A SHARE OF TOTAL SURGICAL CHARGES AND AS A PERCENT OF TOTAL PRACTICE CHARGES, BY MEDICAL SPECIALTY, 1980 AND 1991

Specialty	Percent distribution of surgical charges		Surgical charges as a percent of total practice charges	
	1980	1991	1980	1991
All physicians.....	100.0	100.0	31.8	32.9
Ophthalmology.....	13.6	23.4	62.1	70.6
General surgery.....	22.1	13.3	71.6	73.4
Orthopedic surgery.....	13.0	10.4	73.6	72.4
Urology.....	10.7	6.6	75.6	58.9
Thoracic surgery.....	8.0	6.9	82.2	82.7
Clinic or other group practice.....	4.7	3.2	25.8	23.9
Internal medicine.....	4.2	4.3	6.9	8.7
Cardiovascular disease.....	2.7	7.2	22.4	29.3
Podiatry.....	3.0	3.6	53.5	58.8
Gastroenterology.....	1.7	5.3	45.9	67.9
Dermatology.....	2.4	4.0	60.9	69.5
Neurological surgery.....	2.9	2.0	70.2	78.2
Othology, laryngology, rhinology.....	1.9	.2	49.7	68.5
Plastic surgery.....	1.3	1.3	88.1	86.1
Other.....	8.4	8.5	.....	7.9

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, part B Medicare Annual Data System.

As shown in table 23, many different medical specialties participated in the shift to outpatient surgery. In 1980, only two specialties (dermatology and podiatry) performed the majority of their surgical services in outpatient settings; in these cases, the care was generally provided in the physician's office. In 1991, seven specialties provided a majority of their surgical care in outpatient settings: ophthalmology, podiatry, gastroenterology, dermatology, ENT, internal medicine, and plastic surgery. Podiatrists and dermatologists continued primarily to work in their offices; internist split their non-inpatient work between office and outpatient settings, while the other specialties provided their surgical services in outpatient hospital and ambulatory surgical facilities. Most surgical specialties, such as general, orthopedic, cardiovascular, neurological and thoracic surgeons, remained closely tied to inpatient hospital settings.

TABLE 23.—SUBMITTED SURGICAL CHARGES UNDER MEDICARE, BY MEDICAL SPECIALTY AND PLACE OF SERVICE, 1980 AND 1991

[In percent]

Specialty	1980				1991						
	All settings	Office	Inpatient hospital	Outpatient hospital	Other ¹	All settings	Office	Inpatient hospital	Outpatient hospital ²	ASC ³	Other ¹
All physicians.....	100.0	11.6	84.4	3.3	0.5	100.0	18.9	49.6	25.4	4.4	1.7
Ophthalmology.....	100.0	7.9	87.1	5.0	.1	100.0	20.5	6.1	55.9	14.6	2.8
General surgery.....	100.0	4.4	92.6	2.9	.1	100.0	6.1	77.0	16.0	.4	.5
Orthopedic surgery.....	100.0	6.3	90.2	3.4	.1	100.0	7.8	79.0	12.3	.5	.3
Urology.....	100.0	8.0	90.6	1.4	.1	100.0	19.6	63.5	16.1	.5	.4
Thoracic surgery.....	100.0	.8	98.7	.5	(⁴)	100.0	1.5	96.3	2.0	.0	.1
Clinic and other group practice.....	100.0	10.1	85.3	4.5	.1	100.0	14.6	59.2	24.4	1.3	.5
Internal medicine.....	100.0	17.5	76.6	5.7	.2	100.0	26.7	46.2	25.8	.8	.5
Cardiovascular disease.....	100.0	1.7	97.9	.4	(⁴)	100.0	2.0	89.5	8.2	.3	.3
Podiatry.....	100.0	71.3	13.5	.9	14.3	100.0	70.0	2.3	6.6	1.0	20.0
Gastroenterology.....	100.0	12.0	75.6	12.3	.1	100.0	10.5	40.9	45.7	2.2	.7
Neurological surgery.....	100.0	1.1	98.5	.5	(⁴)	100.0	2.0	95.0	2.7	.0	.2
Dermatology.....	100.0	94.6	4.0	.9	.6	100.0	97.3	1.0	1.1	.2	.4
Otology, laryngology, rhinology.....	100.0	12.6	83.7	3.7	(⁴)	100.0	18.6	4.3	69.1	7.5	.5
Plastic surgery.....	100.0	13.0	67.2	19.7	.1	100.0	23.2	35.8	36.6	2.8	1.5
Obstetrics/gynecology.....	100.0	.....	.....	.....	.....	100.0	13.2	74.4	11.6	.4	.4
Other.....	100.0	.....	.....	.....	.....	100.0	26.1	42.1	24.1	7.0	.7

¹ Includes homes, nursing homes, and other places of service.² May include some services rendered in an ambulatory surgery center.³ Ambulatory surgical center.⁴ Less than .05.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, data from the part B Carrier Statistical System.

TABLE 24.—PERCENT DISTRIBUTION OF ALLOWED SURGICAL CHARGES UNDER MEDICARE, BY SELECTED SPECIALTIES AND SELECTED PLACE OF SERVICE, 1990

	Place of service	Percent
Inpatient hospital:		
General surgery		20.6
Orthopedic surgery		16.6
Thoracic surgery		13.4
Urology		8.4
Cardiovascular disease		12.9
Clinic and other group practice		3.8
Gastroenterology		4.3
Internal medicine		4.0
Ophthalmology		2.9
Neurological surgery		3.8
Other medical and surgical specialties		9.3
Total		100.0
Office:		
Ophthalmology		25.3
Dermatology		20.3
Podiatry		13.3
Urology		7.0
Internal medicine		6.0
General surgery		4.2
Orthopedic surgery		4.3
Gastroenterology		2.9
Clinic and other group practice		2.5
Other medical and surgical specialties		14.2
Total		100.0
Outpatient hospital:		
Ophthalmology		51.4
Gastroenterology		9.5
General surgery		8.4
Orthopedic surgery		5.0
Internal medicine		4.4
Urology		4.1
Clinic and other group practice		3.0
Otology, laryngology, rhinology		0.6
Plastic surgery		1.9
Other medical and surgical specialties		11.7
Total		100.0

Source: Health Care Financing Administration, Bureau of Data Management and Strategy. Data from the part B Medicare Annual Data System.

In 1991, ophthalmologists provided most (51.4 percent) of the surgery done in outpatient hospital settings (see table 22). The predominance of ophthalmologists in this setting is due to cataract surgery. Ophthalmologists also accounted for the largest proportion of office surgical charges, 25.3 percent. However, dermatologists and podiatrists also represented significant percentages of office surgical charges, 20.3 and 13.3 percent respectively. In inpatient settings, the traditional surgical specialties—general surgery, orthopedic surgery, thoracic surgery, urology and cardiovascular surgery—accounted for 71.9 percent of all surgical charges.

OMNIBUS BUDGET RECONCILIATION ACT OF 1990

The Omnibus Budget Reconciliation Act of 1990 was enacted on November 5, 1990. As part of a 5-year plan to reduce the Federal deficit, Congress reduced projected Medicare outlays by \$3.4 billion for fiscal year 1991 and a total of \$43.1 billion from fiscal years 1991 through 1995. Reductions in physicians' services outlays accounted for an estimated \$945 million in fiscal year 1991, and a total of \$9.56 billion from fiscal year 1991 through 1995. Although OBRA 1990 made reductions in payments for physicians' services, the basic structure of physician payment reform enacted in OBRA 1989 remained intact.

Updates in the Medicare Economic Index

OBRA 1990 set the MEI for 1991 at zero percent for all services except primary care services, which means that the prevailing and customary charges were frozen at 1990 levels. Primary care services received a 2 percent update for 1991. In addition, OBRA 1990 also specified that the MEI update for 1992 would be reduced by four-tenths of a percent below what it otherwise would be.

Medicare volume performance standards (MVPS)

OBRA 1990 required the Secretary to publish separate MVPS for surgical services and all other physicians' service for fiscal year 1991. The standards were to be set at the baseline rate of growth in expenditures for fiscal year 1991, minus 2 percentage points.

Reductions in payments for identified overvalued procedures

In OBRA 1987, Congress imposed reductions in prevailing charges for procedures that were identified as being overvalued or overpriced by the PhysPRC. OBRA 1989 expanded the list of procedures the reductions applied to and modified the calculation.

OBRA 1990 made two types of reductions in payments for overvalued procedures. The first made further reductions in payments for the same list of procedures considered overvalued by OBRA 1989. It further reduced the prevailing charges for these procedures by an additional one-third of the difference between the 1990 prevailing charge and a local prevailing charge, which was adjusted for local variations in practice costs in the same manner as in OBRA 1989. As in OBRA 1989, the maximum reduction was 15 percent.

OBRA 1990 reduced the 1991 prevailing charge by 6.5 percent for procedures not categorized as overvalued in OBRA 1989, but subse-

quently identified as overvalued by PhysPRC. These were referred to as unsurveyed surgical and technical procedures. All physicians procedures not specifically excluded were subject to the second type of reduction. Excluded procedures included the following: (1) overvalued procedures subject to reductions in OBRA 1989; (2) radiology, anesthesiology and pathology services; (3) evaluation and management services; (4) the technical component of diagnostic tests subject to a national median cap; and (5) specified services estimated to be overvalued by less than 6.5 percent.

Customary charges of new physicians

OBRA 1990 expanded the concept of reducing new physicians' charges by limiting the customary charges of physicians in their third year of practice to 90 percent of the prevailing charge, and to 95 percent in the fourth year of practice. It also extended the limits on charges by applying them to health care practitioners, who include physicians' assistants; certified nurse-midwives; qualified psychologists; nurse practitioners; clinical social workers; physical and occupational therapists; certified registered nurse-anesthetists; or other practitioners specified by the Secretary.

Beginning in 1992, the approved fee for physicians in their first through fourth years of practice is limited to 80, 85, 90, and 95 percent respectively of the fee schedule amount otherwise applicable.

Payments to anesthesiologists and certified registered nurse anesthetists (CRNAs)

OBRA 1990 reduced anesthesia conversion factors by up to 15 percent, but also established a floor for local conversion factors. The floor was equal to 60 percent of the national average weighted conversion factors. The reduction was equal to the lesser of a 15 percent reduction in the local prevailing charge conversion factors or the amount, if any, by which the local prevailing charge conversion factors exceed the 1990 weighted national average prevailing charge conversion factor, which was both reduced by 7 percent and adjusted for physician work and geographic variations in practice costs. Seventy percent of the prevailing charge conversion factor was attributed to physician work.

OBRA 1990 also continued the reductions in payments to anesthesiologists supervising multiple concurrent procedures performed by certified registered nurse anesthetists.

OBRA 1990 provided for yearly increases in the conversion factors used in the CRNA fee schedule between 1991 and 1996. In 1996, the conversion factor for nonmedically directed CRNAs (those who practice independently) was to equal the expected conversion factor for anesthesiologists. Payments for medically directed CRNAs (those supervised by an anesthesiologist) would equal 70 percent of the expected conversion factor for anesthesiologists. OBRA 1990 also directed that the CRNA fee schedule consist of base and time units, with 70 percent of the conversion factor attributable to work and 30 percent attributable to overhead. In addition, it continued the cost-based passthrough for CRNAs working in rural hospitals that perform less than 500 surgeries a year.

Payments for radiology services

OBRA 1990 slowed the rate of transition to the RBRVS fee schedule, in 1992 only, for radiology services previously paid under the separate radiology fee schedule. For other physician services, payments are reduced to the fee schedule amount unless the adjusted historical payment basis is greater than 115 percent of the fee schedule amount; in this case, the reduction is 15 percent. That provision was modified for payments to physicians subject to the radiology fee schedule such that, if the historical payment basis exceeds 109 percent of the fee schedule, payment would be reduced by 9 percent in 1992.

OBRA 1990 reduced the 1991 conversion factor for radiology services (except portable x-ray services) by the lesser of 9.5 percent or the amount (if any) by which it exceeds the 1990 national weighted-average conversion factor, which was both reduced by 13 percent and adjusted for geographic differences in costs. In applying the geographic adjustments, the proportion attributable to physician work was different for the professional and technical components of radiology services. For the professional component of radiology services, 80 percent of the conversion factor was attributed to physician work. For the technical component, 0 percent was attributed to physician work.

OBRA 1990 further stipulated a floor for 1991 conversion factors; the minimum conversion factor was 60 percent of the national weighted average of conversion factor for 1990. OBRA 1990 also reduced payment for the technical component of magnetic resonance imaging (MRI) and computer axial tomography (CAT) scans by 10 percent, effective January 1, 1991.

OBRA 1990 extended for an additional year the exemption from the prohibition on split billing for interventional and cardiovascular radiologists for 1991. It also froze the transition to the RBRVS fee schedule for physicians for whom nuclear medicine services constituted at least 80 percent of the physician's Medicare billings. Under OBRA 1989, payments for these services were scheduled to be based two-thirds on the fee schedule and one-third on 101 percent of the 1988 prevailing charge. OBRA 1990 retained the payment system in effect in 1990—one-third on the fee schedule and two-thirds on 101 percent of the 1988 prevailing charge. OBRA 1990 also specified that prevailing charges for radiology services not paid under the fee schedule could not exceed fee schedule amounts.

Payments for electrocardiograms (EKGs)

OBRA 1990 provided that, effective January 1, 1992, no separate payment would be made for the routine interpretation of an EKG that is performed or ordered in conjunction with a visit or consultation. Payments would continue to be made for the technical component of EKG's performed on an outpatient basis.

Administrative changes

OBRA 1990 included several administrative provisions. It: provided for recognition of certain reciprocal billing arrangements between physicians under specified conditions during continuous peri-

ods not in excess of 60 days; directed the Secretary to conduct a study of at least six carriers of the effect of releasing prepayment medical review screen parameters; established a Practicing Physicians Advisory Council composed of 15 physicians in active practice, to review and comment on proposed regulations and carrier manual instructions relating to physicians' services; and directed the Secretary to conduct a study in at least four carrier areas of the effect of permitting certain changes in the aggregation rule with respect to claims under appeal.

Balance billing

OBRA 1990 included a provision designed to alleviate a temporary decrease in total reimbursement for physicians providing evaluation and management services during 1991. OBRA 1989 imposed new limits on balance billing that would have reduced total reimbursement (Medicare and beneficiary) to physicians providing evaluation and management services in 1991. The new fee schedule is projected to increase payments for these services. Thus, under OBRA 1989, payments to physicians for these services would decrease in 1991 before being increased in 1992. OBRA 1990 addressed this problem by increasing the limit on balance billing for evaluation and management services from 125 percent to 140 percent of the allowed amount for 1991 only.

Clinical laboratory services

OBRA 1990 specified that the update to the clinical laboratory fee schedule would be 2 percent for 1991, 1992, and 1993. It reduced the national cap on fee schedules from 93 percent of the national median of the areawide fee schedules to 88 percent of the median, effective January 1, 1991. It also clarified the mandatory assignment rule for laboratory services by specifically including lab tests performed in a physician's office.

TABLE 25.—GEOGRAPHIC PRACTICE COST INDICES BY MEDICARE CARRIER LOCALITY

Carrier number	Locality number	Locality name	Work	Practice expense	Malpractice
510	5	Birmingham, AL	0.981	0.913	0.824
510	4	Mobile, AL .....	.964	.911	.824
510	2	North Central Alabama .....	.970	.867	.824
510	1	Northwest Alabama .....	.985	.869	.824
510	6	Rest of Alabama .....	.975	.851	.824
510	3	Southeast Alabama .....	.972	.869	.824
1020	1	Alaska	1.106	1.255	1.042
1030	5	Flagstaff (City), AZ .....	.983	.911	1.255
1030	1	Phoenix, AZ	1.003	1.016	1.255
1030	7	Prescott (City), AZ .....	.983	.911	1.255
1030	99	Rest of Arizona .....	.987	.943	1.255
1030	2	Tucson (City), AZ .....	.987	.989	1.255
1030	8	Yuma (City), AZ .....	.983	.911	1.255
520	13	Arkansas .....	.960	.856	.302
2050	26	Anaheim-Santa Ana, CA	1.046	1.220	1.370

TABLE 25.—GEOGRAPHIC PRACTICE COST INDICES BY MEDICARE CARRIER LOCALITY—
Continued

Carrier number	Locality number	Locality name	Work	Practice expense	Malpractice
542	14	Bakersfield, CA.....	1.028	1.050	1.370
542	11	Fresno/Madera, CA.....	1.006	1.009	1.370
542	13	Kings/Tulare, CA.....	.999	1.001	1.370
2050	18	Los Angeles, CA (1st of 8).....	1.060	1.196	1.370
2050	19	Los Angeles, CA (2d of 8).....	1.060	1.196	1.370
2050	20	Los Angeles, CA (3d of 8).....	1.060	1.196	1.370
2050	21	Los Angeles, CA (4th of 8).....	1.060	1.196	1.370
2050	22	Los Angeles, CA (5th of 8).....	1.060	1.196	1.370
2050	23	Los Angeles, CA (6th of 8).....	1.060	1.196	1.370
2050	24	Los Angeles, CA (7th of 8).....	1.060	1.196	1.370
2050	25	Los Angeles, CA (8th of 8).....	1.060	1.196	1.370
542	3	Marin/Napa/Solano, CA.....	1.012	1.198	1.370
542	10	Merced/Surrounding Countys, CA.....	1.018	1.009	1.370
542	12	Monterey/Santa Cruz, CA.....	1.023	1.108	1.370
542	1	North Coastal Countys, CA.....	1.003	1.072	1.370
542	2	Northeast Rural California.....	1.001	.990	1.370
542	7	Oakland-Berkeley, CA.....	1.028	1.258	1.370
542	27	Riverside, CA.....	1.026	1.080	1.370
542	4	Sacramento/Surrounding Countys, CA.....	1.026	1.088	1.370
542	15	San Bernardino/East Central, CA.....	1.025	1.077	1.370
2050	28	San Diego/Imperial, CA.....	1.026	1.090	1.370
542	5	San Francisco, CA.....	1.038	1.303	1.370
542	6	San Mateo, CA.....	1.038	1.303	1.370
2050	16	Santa Barbara, CA.....	1.012	1.073	1.370
542	9	Santa Clara, CA.....	1.048	1.286	1.370
542	8	Stockton/Surrounding Countys, CA.....	1.019	1.027	1.370
2050	17	Ventura, CA.....	1.034	1.132	1.370
550	1	Colorado.....	.999	.988	.683
10230	4	Eastern Connecticut.....	.999	1.053	1.036
10230	1	Northwest and North Central Connecticut...	1.002	1.071	1.025
10230	3	South Central Connecticut.....	1.018	1.103	1.188
10230	2	Southwest Connecticut.....	1.053	1.139	1.231
570	1	Delaware.....	1.026	1.018	.664
580	1	D.C. + MD/VA suburbs.....	1.059	1.168	.947
590	3	Fort Lauderdale, FL.....	.993	.981	1.376
590	4	Miami, FL.....	1.034	1.025	1.641
590	2	North/North central Florida cities.....	.975	.932	1.108
590	1	Rest of Florida.....	.966	.871	1.108
1040	1	Atlanta, GA.....	.975	1.022	.752
1040	4	Rest of Georgia.....	.956	.841	.752
1040	2	Small Georgia cities 02.....	.962	.895	.752
1040	3	Small Georgia cities 03.....	.961	.869	.752
1120	1	Hawaii.....	1.003	1.094	1.025
5130	12	North Idaho.....	.965	.917	.889
5130	11	South Idaho.....	.967	.936	.889
621	10	Champaign-Urbana, IL.....	.965	.920	1.137
621	16	Chicago, IL.....	1.044	1.114	1.773

TABLE 25.—GEOGRAPHIC PRACTICE COST INDICES BY MEDICARE CARRIER LOCALITY—
Continued

Carrier number	Locality number	Locality name	Work	Practice expense	Malpractice
621	3	De Kalb, IL .....	.978	.925	1.137
621	11	Decatur, IL .....	.981	.927	1.137
621	12	East St. Louis, IL .....	.989	.958	1.579
621	6	Kankakee, IL .....	.972	.925	1.137
621	8	Normal, IL .....	.997	.968	1.137
621	1	Northwest, IL .....	.974	.896	1.137
621	5	Peoria, IL	1.009	1.031	1.137
621	7	Quincy, IL .....	.974	.896	1.137
621	4	Rock Island, IL .....	.995	.958	1.137
621	2	Rockford, IL	1.010	1.018	1.137
621	13	Southeast Illinois .....	.974	.896	1.137
621	14	Southern Illinois .....	.974	.896	1.137
621	9	Springfield, IL .....	.996	.966	1.137
621	15	Suburban Chicago, IL	1.020	1.097	1.137
630	1	Metropolitan Indiana .....	.998	.963	.547
630	3	Rest of Indiana .....	.979	.896	.516
630	2	Urban Indiana .....	.980	.905	.516
640	5	Des Moines (Polk/Warren), IA .....	.997	.966	.666
640	3	North central Iowa .....	.971	.916	.666
640	2	Northeast Iowa .....	.972	.918	.666
640	6	Northwest Iowa .....	.969	.890	.666
640	4	South central Iowa (excludes Des Moines) .....	.962	.881	.666
640	1	Southeast Iowa (includes Iowa City) .....	.976	.933	.666
640	7	Southwest Iowa .....	.968	.900	.666
740	5	Kansas City, KS .....	.978	.964	1.134
650	1	Rest of Kansas .....	.953	.893	1.134
740	4	Suburban Kansas City, KS .....	.978	.964	1.134
660	1	Lexington and Louisville, KY .....	.984	.917	.667
660	3	Rest of Kentucky .....	.974	.875	.667
660	2	Small cities (city limits) KY .....	.976	.898	.667
528	7	Alexandria, LA .....	.985	.889	.808
528	3	Baton Rouge, LA .....	.991	.966	.808
528	6	Lafayette, LA .....	.982	.928	.808
528	4	Lake Charles, LA .....	.975	.907	.808
528	5	Monroe, LA .....	.979	.880	.808
528	1	New Orleans, LA .....	.994	1.003	1.185
528	50	Rest of Louisiana .....	.972	.880	.824
528	2	Shreveport, LA	1.003	.940	.808
21200	2	Central Maine .....	.942	.903	.716
21200	1	Northern Maine .....	.947	.912	.716
21200	3	Southern Maine .....	.956	.980	.716
690	1	Baltimore/Surrounding Countys, MD	1.027	1.040	.927
690	3	South + Eastern Shore, MD	1.011	1.010	.820
690	2	Western Maryland	1.006	1.013	.843
700	2	Massachusetts suburbs/rural (cities) .....	.997	1.072	.855
700	1	Massachusetts Urban	1.002	1.131	.855

TABLE 25.—GEOGRAPHIC PRACTICE COST INDICES BY MEDICARE CARRIER LOCALITY—
Continued

Carrier number	Locality number	Locality name	Work	Practice expense	Malpractice
710	1	Detroit, MI.....	1.059	1.091	1.736
710	2	Michigan, not Detroit.....	1.010	.971	1.196
720	00	Minnesota (Blue Shield) .....	.999	.971	.748
10240	00	Minnesota (Travelers).....	.999	.971	.748
10250	1	Rest of Mississippi .....	.960	.838	.650
10250	2	Urban Mississippi (city limits) .....	.966	.902	.650
740	3	Kansas City (Jackson County), MO.....	.978	.964	1.179
740	2	North Kansas City (Clay/Platte), MO.....	.978	.964	1.179
11260	3	Rest of Missouri .....	.950	.847	1.179
740	6	Rural Northwest counties, Missouri .....	.953	.866	1.179
11260	2	Small Eastern Cities, MO .....	.954	.838	1.179
740	1	St. Joseph, MO .....	.950	.867	1.179
11260	1	St. Louis/Large Eastern Cities, MO.....	.988	.964	1.352
751	1	Montana .....	.967	.926	.718
655	00	Nebraska .....	.960	.883	.435
1290	3	Elko and Ely (Cities), NV .....	.984	1.026	1.144
1290	1	Las Vegas, et al (cities), NV	1.036	1.082	1.144
1290	2	Reno, et al (cities), NV	1.008	1.141	1.144
1290	99	Rest of Nevada	1.020	1.079	1.144
780	40	New Hampshire.....	.962	1.011	.602
860	2	Middle New Jersey	1.034	1.070	1.153
860	1	Northern New Jersey	1.040	1.131	1.153
860	3	Southern New Jersey.....	1.016	1.030	1.153
1360	5	New Mexico.....	.981	.925	.767
801	1	Buffalo/Surrounding Countys, NY	1.006	.942	.963
803	1	Manhattan, NY	1.059	1.255	1.647
801	3	North central cities, New York .....	.997	.952	.963
803	2	New York City suburbs/Long Island, NY.....	1.060	1.229	1.929
803	3	Poughkepsie/N. New York City suburbs	1.004	1.018	1.325
14330	4	Queens, NY	1.059	1.255	1.861
801	2	Rochester/Surrounding Countys, NY.....	1.021	1.017	.963
801	4	Rest of New York.....	.988	.935	.963
5535	95	Rest of North Carolina.....	.963	.883	.378
5535	94	Urban (City Limits) North Carolina .....	.975	.926	.378
820	1	North Dakota.....	.965	.895	.688
16360	1	Akron, OH .....	.993	.944	.920
16360	2	Cincinnati, OH .....	.989	.956	.920
16360	3	Cleveland, OH	1.011	.968	.920
16360	4	Columbus, OH.....	.983	.956	.920
16360	5	Dayton, OH.....	.999	.935	.920
16360	9	East Central (Steubenville), OH .....	.974	.912	.920
16360	7	Mansfield, OH.....	.972	.906	.920
16360	13	Marion + Surrounding Countys, OH.....	.971	.911	.920
16360	6	Northwest (Lima) OH .....	.973	.919	.920
16360	14	Scioto Valley, OH.....	.977	.936	.920
16360	15	Southeast (Ohio Valley) OH .....	.973	.909	.920
16360	8	Springfield, OH	1.004	.940	.920

TABLE 25.—GEOGRAPHIC PRACTICE COST INDICES BY MEDICARE CARRIER LOCALITY—
Continued

Carrier number	Locality number	Locality name	Work	Practice expense	Malpractice
16360	10	Toledo (Lucas/Wood), OH.....	.991	.996	.920
16360	12	West Central (Lake Plains), OH.....	.969	.906	.920
16360	11	Youngstown, OH.....	.987	.937	.920
1370	00	Oklahoma.....	.969	.911	.516
1380	2	Eugene, et al (cities), OR.....	.968	1.008	.951
1380	1	Portland, et al (cities), OR.....	.993	1.033	.951
1380	99	Rest of Oregon.....	.979	.997	.951
1380	3	Salem, et al (cities), OR.....	.974	.990	.951
1380	12	Southwest Oregon cities (city limits).....	.974	.988	.951
865	2	Large Pennsylvania cities.....	1.008	1.001	1.440
865	1	Philly/Pitt Medium Schools/Hospitals.....	1.014	1.014	1.552
865	4	Rest of Pennsylvania.....	.975	.929	.986
865	3	Small Pennsylvania cities.....	.984	.945	.986
973	20	Puerto Rico.....	.882	.763	.466
870	1	Rhode Island.....	1.009	.998	.734
880	1	South Carolina.....	.971	.874	.448
820	2	South Dakota.....	.951	.857	.688
5440	35	Tennessee.....	.969	.896	.407
900	29	Abilene, TX.....	.971	.888	.504
900	26	Amarillo, TX.....	.972	.900	.504
900	31	Austin, TX.....	.969	.968	.504
900	20	Beaumont, TX.....	.998	.955	.504
900	9	Brazoria, TX.....	1.025	.955	.504
900	10	Brownsville, TX.....	.980	.888	.504
900	24	Corpus Christi, TX.....	.976	.944	.504
900	11	Dallas, TX.....	.996	.971	.504
900	12	Denton, TX.....	.996	.971	.504
900	14	El Paso, TX.....	.995	.894	.504
900	28	Fort Worth, TX.....	.973	.936	.504
900	15	Galveston, TX.....	.982	.968	.504
900	16	Grayson, TX.....	.964	.903	.504
900	18	Houston, TX.....	1.014	.982	.656
900	33	Laredo, TX.....	.968	.856	.504
900	17	Longview, TX.....	.968	.929	.504
900	21	Lubbock, TX.....	.950	.881	.504
900	19	Mc Allen, TX.....	.945	.873	.504
900	23	Midland, TX.....	1.023	.998	.504
900	2	Northeast rural Texas.....	.968	.883	.504
900	13	Odessa, TX.....	1.008	.971	.504
900	25	Orange, TX.....	.998	.955	.504
900	30	San Angelo, TX.....	.954	.902	.504
900	7	San Antonio, TX.....	.973	.929	.504
900	3	Southeast rural Texas.....	.973	.895	.504
900	6	Temple, TX.....	.969	.886	.504
900	8	Texarkana, TX.....	.953	.883	.504
900	27	Tyler, TX.....	.984	.931	.504
900	32	Victoria, TX.....	.976	.973	.504

TABLE 25.—GEOGRAPHIC PRACTICE COST INDICES BY MEDICARE CARRIER LOCALITY—
Continued

Carrier number	Locality number	Locality name	Work	Practice expense	Malpractice
900	22	Waco, TX.....	.981	.871	.504
900	4	Western rural Texas .....	.961	.852	.504
900	34	Wichita Falls, TX .....	.969	.896	.504
910	9	Utah.....	.993	.952	.739
780	50	Vermont .....	.942	.941	.533
10490	1	Richmond + Charlottesville, VA.....	.975	.953	.462
10490	4	Rest of Virginia .....	.967	.888	.522
10490	3	Small town/Industrial Virginia.....	.971	.892	.531
10490	2	Tidewater + North Virginia Counties .....	.989	.994	.703
973	50	Virgin Islands	1.000	1.000	1.000
932	4	East central + Northeast Washington (excludes Spokane) .....	.991	.979	1.064
932	2	Seattle (King County), WA	1.019	1.049	1.064
932	3	Spokane + Richland (cities), WA .....	.996	.995	1.064
932	1	West + Southeast Washington (excludes Seattle)	1.008	.992	1.064
16510	16	Charleston, WV.....	.987	.962	.688
16510	18	Eastern Valley, WV.....	.962	.881	.688
16510	19	Ohio River Valley, WV.....	.962	.881	.688
16510	20	Southern Valley, WV.....	.960	.876	.688
16510	17	Wheeling, WV.....	.975	.900	.688
951	13	Central Wisconsin.....	.960	.888	.762
951	40	Green Bay, WI (Northeast) .....	.979	.913	.762
951	54	Janesville, WI (South-Central) .....	.970	.905	.762
951	19	La Crosse, WI (West-Central) .....	.976	.919	.762
951	15	Madison, WI (Dane County) .....	.977	.979	.762
951	46	Milwaukee suburbs, WI (SE)	1.010	1.008	.762
951	4	Milwaukee, WI.....	1.008	1.009	.762
951	12	Northwest Wisconsin .....	.966	.898	.762
951	60	Oshkosh, WI (East-Central) .....	.974	.911	.762
951	14	Southwest Wisconsin.....	.960	.888	.762
951	36	Wausau, WI (North-Central) .....	.971	.898	.762
825	21	Wyoming.....	.988	.938	.641

Note: Work GPCI is the ¼ work GPCI required by Pub. L. 101-239.

Source: Federal Register, Vol. 56, No. 227, Monday, November 25, 1991; 59785-59790.

Section 5. Trade Adjustment Assistance

The trade adjustment assistance (TAA) programs were first established under the Trade Expansion Act of 1962 for the purpose of assisting in the special adjustment problems of workers and firms dislocated as a result of a Federal policy of reducing barriers to foreign trade. As a result of limited eligibility and usage of the programs, criteria and benefits were liberalized under title II of the Trade Act of 1974, Public Law 93-618. The Omnibus Budget Reconciliation Act of 1981 (OBRA), Public Law 97-35, reformed the program for workers as proposed by the Administration. The amendments, particularly in program eligibility and benefits, were intended to reduce program cost significantly and to shift its focus from income compensation for temporary layoffs to a return to work through training and other adjustment measures for the long-term or permanently unemployed. The OBRA also made relatively minor modifications in the program for firms. Most amendments became effective on October 1, 1981. Both programs were extended at that time for 1 year, to terminate on September 30, 1983.

Public Law 98-120 (H.R. 3813 as amended by the Senate), approved on October 12, 1983, extended the worker and firm TAA programs for 2 years until September 30, 1985. Sections 2671-2673 of the Deficit Reduction Act of 1984, Public Law 98-369, included three provisions (sections 3, 6, and 8 of H.R. 3391 as passed by the House on September 15, 1983) which amended the program for workers to increase the availability of worker training allowances and the level of job search and relocation benefits, and amended the program for firms to increase the availability of industrywide technical assistance.

The termination date of the worker and firm TAA programs was further extended under temporary legislation in the first session of the 99th Congress (Public Laws 99-107, 99-155, 99-181, and 99-189) until December 19, 1985. The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA), Public Law 99-272 approved April 7, 1986, reauthorized the TAA programs for workers and firms for 6 years retroactively from December 19, 1985, until September 30, 1991, with amendments.

Sections 1421-1430 of Public Law 100-418, the Omnibus Trade and Competitiveness Act of 1988 (OTCA), enacted on August 23, 1988, made significant amendments in the worker TAA program, particularly concerning the eligibility criteria for cash benefits, funding, and administration, further increasing the emphasis on worker training. The amendments also expanded TAA coverage of workers and firms, contingent upon the imposition of an import fee to fund program costs. The OTCA extended TAA program authorization for an additional 2 years until September 30, 1993.

Section 136 of the "Customs and Trade Act of 1990," Public Law 101-382, approved on August 20, 1990, extended the completion and

APPENDIX I. DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS OF THE ELDERLY

This appendix presents selected historical and current data on the demographic and economic characteristics of the elderly. Tables 1 through 20 present characteristics of the overall elderly population, including: population and life expectancy trends; marital status and living arrangements; labor force participation; poverty statistics; and income sources. Data sources are noted at the bottom of each table.

The following definitions may be useful for reading the tables:

(1) "Aged" and "elderly" each refer to any person 65 years old or older.

(2) "OASDI" and "Social Security" are used interchangeably.

(3) "Supplemental security income" is, at times, abbreviated "SSI."

(4) The concepts "unrelated individual" and "unit" are used many times throughout this appendix. "Unrelated individual" refers to any individual living alone. "Unit" refers to an individual living alone, a couple living alone or a family.

POPULATION

The U.S. population is aging. As table 1 illustrates, there has been and will continue to be a dramatic increase in the proportion of the population that is elderly. The elderly represented 6.8 percent of the population in 1940, 11.1 percent in 1980, and are projected to represent 12.6 percent of the population by the year 2000. The actual number of elderly individuals is expected to quadruple between 1940 and 2000, and increase by roughly 37 percent between 1980 and 2000.

The percentages of the population that are 75 and over and 85 and over will grow at a faster rate than the overall elderly population. Between 1980 and 2000, the percentage of the population that is over age 75 is projected to increase from 4.4 to 6.0 percent. The percentage of the population that is age 85 and over is projected to increase from 1.0 to 1.6 percent.

TABLE 1.—ELDERLY POPULATION AS PERCENT OF TOTAL POPULATION AND DISTRIBUTION OF ELDERLY BY AGE AND SEX, SELECTED YEARS 1940 TO 2025,
AS OF JULY 1

	1940	1950	1960	1970	1980	1990	2000 ¹	2025 ¹
Population 65 years and older (in thousands)	9,556	12,807	17,268	20,892	26,125	31,995	35,682	61,480
Population age 65 and older as a percent of total population	6.8	8.0	9.1	9.7	11.1	12.3	12.6	18.8
Population age 75 and older as a percent of total population	2.0	2.5	3.1	3.7	4.4	5.2	6.0	7.9
Population age 85 and older as a percent of total population	0.3	0.4	0.5	0.7	1.0	1.3	1.6	2.1
Certain age and sex groupings as a percent of the population 65 years and older:								
Total 65 years and older	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men 65 and older	48.4	46.8	44.5	41.6	40.3	40.8	41.6	44.3
Men 65 to 74	34.8	32.6	30.2	26.9	26.3	25.9	23.9	27.6
Men 75 to 84	11.9	12.2	12.2	12.4	11.3	12.1	14.0	13.2
Men 85 and older	1.7	2.0	2.2	2.4	2.8	2.9	3.6	3.5
Women 65 and older	51.6	53.2	55.5	58.4	59.7	59.2	58.4	55.7
Women 65 to 74	35.8	35.7	35.7	34.7	33.9	31.8	28.3	30.5
Women 75 to 84	13.4	14.7	16.3	19.2	19.3	19.8	21.1	17.7
Women 85 and older	2.3	2.8	3.5	4.6	6.5	7.5	9.0	7.4

¹ Projection.

Note: Population data include total U.S. plus the outlying areas covered under the Social Security program and an adjustment for population undercount.

Source: 1991 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, and unpublished estimates from the Office of the Actuary, Social Security Administration.

TRENDS IN LIFE EXPECTANCY

Table 2 presents data on life expectancies both at birth and at age 65 for men and women. These data cover the historical period 1900 through 1990, and the projected period 2000 through 2070. On average, a female born in 1900 could expect to live 49 years; a female born in 1990 could expect to live nearly 79 years. Life expectancies at birth have increased so dramatically primarily because infant and child mortality rates have decreased, but also because individuals who live to adulthood are living longer. A male reaching age 65 in 1900 could expect to live another 11 years on average; a male reaching age 65 in 1990 could expect to live nearly 15 more years. Life expectancies at birth and at age 65 are expected to continue to increase.

TABLE 2.—ACTUAL AND PROJECTED LIFE EXPECTANCIES ¹ AT BIRTH AND AT AGE 65 FOR MEN AND WOMEN: 1900–2070

Year	Life expectancy at birth		Life expectancy at age 65	
	Male	Female	Male	Female
Actual:				
1900.....	46.4	49.0	11.4	11.7
1910.....	50.1	53.6	11.4	12.1
1920.....	54.5	56.3	11.8	12.3
1930.....	58.0	61.3	11.8	12.9
1940.....	61.4	65.7	11.9	13.4
1950.....	65.6	71.1	12.8	15.1
1960.....	66.7	73.2	12.9	15.9
1970.....	67.1	74.9	13.1	17.1
1980.....	69.9	77.5	14.0	18.4
1990 ²	71.1	78.8	14.9	18.9
Projected ³:				
2000.....	72.6	79.7	15.4	19.4
2010.....	74.0	80.5	15.8	19.7
2020.....	74.7	81.2	16.3	20.2
2030.....	75.3	81.8	16.7	20.6
2040.....	75.9	82.4	17.1	21.1
2050.....	76.5	82.9	17.5	21.5
2060.....	77.0	83.5	17.9	22.0
2070.....	77.5	84.0	18.3	22.4

¹ The life expectancy for any year is the average number of years of life remaining for a person if that person were to experience the death rates by age observed in, or assumed for, the selected years.

² Estimated.

³ Based on the intermediate mortality assumptions of the 1993 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds.

Source: Office of the Actuary, Social Security Administration.

MARITAL STATUS AND LIVING ARRANGEMENTS

Tables 3 and 4 present information on the marital status and living arrangements of noninstitutionalized aged individuals for 1970, 1980, 1989, and 1991. Table 3 also includes data for 1960.

Perhaps the most striking statistics are those that apply to elderly women. In each of the 5 years of table 3, roughly 40 percent of elderly women ages 65 to 74, and roughly 70 percent of elderly women ages 75 and over, were widows. The percentage of widowed elderly women ages 65 to 74 has decreased steadily since 1960. However, because the size of the elderly population grew between 1960 and 1991, there are increasing numbers of widowed elderly women in the United States. As shown in table 4 there were 5.9 million widowed women over age 65 in 1970 and 8.5 million by 1991, representing a 42-percent increase.

A large and increasing fraction of all noninstitutionalized widowed women live alone. Seventy-one percent of widowed women lived alone in 1991, compared with 56 percent in 1970. As a result of this increase, the number of widowed women living alone has grown even faster than the overall number of widowed women. Between 1970 and 1991, the number of widowed women living alone increased by over 80 percent, from 3.3 to 6.0 million.

TABLE 3.—MARITAL STATUS OF AGED INDIVIDUALS, ¹ BY SEX AND AGE, 1960, 1970, 1980, 1989, AND 1991

	1960		1970 ²		1980 ³		1989		1991	
	65 to 74	75 and over	65 to 74	75 and over	65 to 74	75 and over	65 to 74	75 and over	65 to 74	75 and over
Men:										
Number (in thousands)	4,778	2,280	5,333	3,031	6,459	3,234	7,880	4,199	8,156	4,391
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married, wife present	76.2	56.5	74.6	57.5	79.4	67.7	78.4	66.7	79.0	65.6
Married, wife absent	2.7	2.6	3.0	4.0	2.2	1.7	2.7	2.7	1.9	2.7
Widowed	12.7	31.6	11.0	30.4	8.5	24.0	8.9	23.4	9.2	24.8
Divorced	1.7	1.5	2.9	1.5	4.4	2.2	5.1	2.8	5.3	3.2
Never married	6.7	7.8	8.5	6.6	5.4	4.4	4.9	4.4	4.7	3.7
Women:										
Number (in thousands)	5,529	3,054	6,741	4,608	8,549	5,411	9,867	7,077	10,081	7,464
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Married, husband present	43.5	20.6	43.8	18.9	48.1	22.1	51.4	24.3	51.4	24.0
Married, husband absent	2.1	1.2	1.6	1.9	2.0	1.2	1.8	1.4	1.9	1.3
Widowed	44.4	68.3	43.7	70.5	40.3	68.0	36.6	65.6	35.3	65.7
Divorced	1.7	1.2	3.0	1.3	4.0	2.3	5.7	2.9	6.6	3.5
Never married ⁴	8.4	8.6	7.9	7.4	5.6	6.4	4.5	5.8	4.8	5.5

¹ Civilian noninstitutional population only.² Estimates based on weights derived from the 1960 decennial census.³ Estimates based on weights derived from the 1970 decennial census.⁴ Never married was reported as "single" for 1960.

Note: Details may not add to totals due to rounding.

Source: U.S. Bureau of the Census, Current Population Reports, series P-20, Nos. 135, 212, 365, 423, 445, 450, and 461.

TABLE 4.—LIVING ARRANGEMENTS OF PERSONS AGED 65 AND OVER,¹ 1970, 1980, 1989, 1990, AND 1991

[Civilian noninstitutionalized population, number in thousands]

Living arrangement	Total 65 and over	Percent	Wid-owed men	Percent	Wid-owed women	Percent
Total:						
1970 ²	19,061	100.0	1,333	100.0	5,946	100.0
1980 ³	24,194	100.0	1,342	100.0	7,295	100.0
1989.....	29,022	100.0	1,686	100.0	8,260	100.0
1990.....	29,566	100.0	1,755	100.0	8,367	100.0
1991.....	30,093	100.0	1,841	100.0	8,464	100.0
In families:						
1970 ²	13,347	70.0	499	37.4	2,386	40.1
1980 ³	16,355	67.6	385	28.7	2,194	30.1
1989.....	19,567	67.4	553	32.8	2,297	27.8
1990.....	19,737	66.8	525	29.9	2,202	26.3
1991.....	20,038	66.6	564	30.6	2,240	26.5
Living alone:						
1970 ²	5,071	26.6	708	53.1	3,309	55.7
1980 ³	7,328	30.3	893	66.5	4,916	67.4
1989.....	8,851	30.5	1,058	62.8	5,752	69.6
1990.....	9,176	31.0	1,117	63.6	5,946	71.1
1991.....	9,381	31.2	1,166	63.3	6,013	71.0
Other:						
1970 ²	645	3.4	124	9.3	251	4.2
1980 ³	511	2.1	65	4.8	186	2.5
1989.....	604	2.1	75	4.4	211	2.6
1990.....	653	2.2	113	6.4	220	2.6
1991.....	675	2.2	111	6.0	212	2.5

¹ Excludes persons in institutions (nursing homes, etc.). The number of such persons age 65 years and over was estimated to be 0.8 million in 1970, and 1.6 million in 1989.

² Estimates based on weights derived from the 1970 decennial census.

³ Estimates based on weights derived from the 1980 decennial census.

Source: Bureau of the Census, Current Population Reports, P-20, Nos. 445, 450, 461 and unpublished data.

LABOR FORCE PARTICIPATION

Table 5 presents information on the labor force participation rates of men and women ages 55 and over for selected years between 1950 and 1992. Since 1950, the labor force participation rate for men in this age group has steadily declined. For men ages 55 to 64, the rate has declined from 87 to 67 percent. For men ages 65 and over, the rate has declined from 46 to 16 percent. The trend looks different for women. The participation rate for women ages 55 to 64 has increased from 27 percent in 1950 to 47 percent in 1992. The rate for women ages 65 and over has decreased from 10 percent in 1950 to 8 percent in 1992.

TABLE 5.—CIVILIAN LABOR FORCE PARTICIPATION RATES ¹ OF PERSONS 55 YEARS AND OVER, BY AGE AND SEX, SELECTED YEARS, 1950-92

Age	1950	1955	1960	1965	1970	1975	1980	1985	1989	1990	1991	1992
Men:												
55 to 64.....	86.9	87.9	86.8	84.6	83.0	75.8	72.3	67.9	67.2	67.7	66.9	67.0
55 to 59.....	(2)	92.5	91.6	90.2	89.5	84.4	81.9	79.6	79.5	79.8	79.0	78.9
60 to 64.....	(2)	82.5	81.1	78.0	75.0	65.7	61.0	55.6	54.8	55.5	54.8	54.7
60 to 61.....	(2)	(2)	(2)	84.8	82.6	75.2	71.8	68.9	68.5	68.8	68.5	67.2
62 to 64.....	(2)	(2)	(2)	73.2	69.4	58.8	52.8	46.1	45.3	46.4	45.5	46.2
65 and over.....	45.8	39.6	33.1	27.9	26.8	21.7	19.1	15.8	16.6	16.4	15.8	16.1
Women:												
55 to 64.....	27.0	32.5	37.2	41.4	43.0	41.0	41.5	42.0	45.0	45.3	45.3	46.6
55 to 59.....	(2)	35.6	42.2	47.1	50.4	47.9	48.6	50.3	54.8	55.3	55.7	56.8
60 to 64.....	(2)	29.0	31.4	34.0	36.1	33.3	33.3	33.4	35.5	35.5	35.1	36.5
60 to 61.....	(2)	(2)	(2)	40.4	41.4	39.5	39.8	40.3	43.3	42.9	43.6	45.8
62 to 64.....	(2)	(2)	(2)	29.5	32.3	29.0	28.6	28.7	30.3	30.7	29.3	30.5
65 and over.....	9.7	10.6	10.8	10.0	9.7	8.3	8.1	7.3	8.4	8.7	8.6	8.3

¹ Civilian labor force as percent of civilian noninstitutional population aged 16 or older.² Data not available.

Source: Bureau of Labor Statistics.

POVERTY STATUS OF THE ELDERLY ¹

Table 6 shows that the elderly have a lower incidence of poverty than does the population as a whole. In 1991, 12.4 percent of the noninstitutionalized aged were poor, compared to 14.2 percent of the total population. In spite of the slightly lower incidence of poverty, poverty rates among the aged vary considerably.

The poverty rate for aged women was almost twice the poverty rate for aged men in 1991. The poverty rate among the black aged was significantly higher in 1991 than that of the white aged—25.6 percent of black aged men and 39.3 percent of black aged women were poor, compared with 6.1 percent of white men and 13.3 percent of white women.

Unrelated aged individuals had much higher poverty rates than aged persons living in families. White unrelated individuals had lower poverty rates than black unrelated individuals.

¹ Please see Appendix J for additional poverty data related to the elderly. Appendix J provides details on how poverty is measured, statistics on trends in the overall poverty rate, and comparisons of the poverty rate among selected demographic groups, including the elderly.

TABLE 6.—POVERTY STATUS OF ALL PERSONS, AND THE ELDERLY BY SEX, RACE, AND FAMILY STATUS FOR SELECTED YEARS, 1959-91

[Percent below the poverty level]

	1959	1966	1970	1975	1980	1985 ¹	1986	1987 ²	1988	1989	1990	1991
All persons.....	22.4	14.7	12.6	12.3	13.0	14.0	13.6	13.4	13.0	12.8	13.5	14.2
Persons 65 years old and over												
Both sexes.....	35.2	28.5	24.5	15.3	15.7	12.6	12.4	12.5	12.0	11.4	12.2	12.4
Men.....	NA	23.7	19.0	11.4	10.9	8.5	8.5	8.6	8.0	7.8	7.6	7.9
Black men ³	NA	52.2	41.3	31.0	31.5	26.5	24.2	23.2	23.7	22.1	27.8	25.6
Heads of households ⁴	60.4	50.0	39.2	26.0	25.0	21.0	19.4	18.3	19.3	13.7	20.2	16.2
Unrelated individuals.....	77.5	72.7	59.7	51.8	45.4	40.6	39.8	39.0	35.6	43.2	44.0	43.0
White men ³	NA	21.3	17.0	9.5	9.0	6.9	6.9	7.1	6.2	6.6	5.6	6.1
Heads of households ⁴	26.8	18.7	13.8	7.1	6.9	4.9	4.9	5.0	4.2	5.0	3.9	4.3
Unrelated individuals.....	56.8	41.3	36.0	23.8	21.1	17.6	16.7	17.0	16.5	14.1	13.1	13.8
Women.....	NA	32.1	28.4	18.1	19.0	15.6	15.2	15.3	14.9	14.0	15.4	15.5
Black women ³	NA	57.3	53.2	40.2	42.6	34.8	35.5	38.6	38.0	36.7	37.9	39.3
Wives ⁴	57.7	51.9	41.8	23.8	23.5	17.5	14.4	17.7	21.1	15.0	19.5	19.1
Unrelated individuals.....	84.6	83.9	79.2	65.8	66.6	55.4	59.7	60.3	56.5	59.8	60.1	57.7
White women ³	NA	30.3	26.5	16.1	16.8	13.8	13.3	13.0	12.6	11.8	13.2	13.3
Wives ⁴	28.9	20.2	14.0	7.2	7.0	4.7	4.7	4.7	4.0	4.8	3.9	4.1
Unrelated individuals.....	61.8	55.2	47.5	29.1	29.3	24.3	23.7	22.8	22.4	20.2	24.0	24.1

¹ The poverty definition used to produce the estimates for 1981 and years after changed slightly from previous years. If the new method were used for 1980, the heading "All persons" would read 13.2 percent below the poverty level, not 13.0 percent. In 1984, a new method of imputing missing values was utilized and new population weights were used. A comparable number for 1983 of the poverty rate for all persons was 15.4 percent.

² Revised 1987 data using the 1988 processing system.

³ Total includes other types of family members not separately designated.

⁴ Heads of households defined as "male" reference persons in families. Wives defined as females who are married with spouse present.

NA—Not available.

Sources: U.S. Bureau of the Census, Current Population Reports series P-60 referring to the population below the poverty level, various years in series; unpublished data. The 1986-1991 figures were prepared by the Congressional Research Service using the March Current Population Survey.

Table 7 presents additional information on the poverty status of the elderly, this time broken down by sex and marital status. This table shows that most of the difference in the incidence of poverty between aged men and aged women appears to be associated with differences in marital status and age. Comparing married men and women, the incidence of poverty is essentially the same at each age. Among aged men, poverty rates are highest among those who are divorced, separated, or never married, and those who are widowed and among men ages 85 and over. Among aged women, particularly those over age 74, poverty rates are highest among those who are divorced, separated, or never married, and those who are widowed.

TABLE 7.—POVERTY RATES AMONG PERSONS AGE 65 AND OLDER BY AGE, SEX, AND MARITAL STATUS: 1991

	65 and over	65 to 74	75 to 84	85 and over
Male total.....	7.9	7.6	8.0	10.8
Married	5.3	5.0	5.5	7.9
Widowed	15.0	15.3	15.1	13.8
Divorced/separated/never married	17.3	18.5	13.3	NA
Female total	15.5	13.1	17.8	22.7
Married	5.4	4.8	6.8	NA
Widowed	21.2	19.9	22.0	22.8
Divorced/separated/never married	27.4	28.1	24.0	NA
Total.....	12.4	10.6	14.0	18.9

NA—Not available due to unreliability of estimate. Percentage base represents fewer than 250,000 persons.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

INCOME SOURCES OF THE ELDERLY

As noted in the previous subsection, most elderly individuals had incomes above the poverty threshold in 1991, although a sizeable minority was poor. Tables 9 through 18 provide insight into the sources and distribution of income among the elderly population. The percentage of the aged represented in the various tables is shown below.

TABLE 8.—CHARACTERISTICS OF AGED UNITS: 1992

Description of unit	Number of units (in thousands)	Persons age 65 and older (in thousands)	Percent of total elderly
All persons in unit age 65 and over	16,456	22,812	71.0
At least one person age 65 or older	23,176	30,590	95.2
Family head age 65 or older	21,380	28,514	88.7
Number of aged not represented by the Current Population Survey		1,548	4.8

Note: Units comprise families and unrelated individuals.

Source: March 1992 Current Population Survey. Table prepared by CRS.

Table 9 provides information for 1991 on the percentage of non-institutional elderly units (all members ages 65 and over) with income from various sources, broken down by income level. Note that the bottom rows of table 9 present characteristics of persons in elderly units, by income level of the unit. The majority of these units has combined income above the poverty level (83 percent). As one would expect, the fraction of units with income from earnings generally rises as income rises. For example, 5 percent of the units with income less than the poverty threshold had income from earnings, compared with almost 20 percent of the units with income above the poverty threshold. Although overall 94 percent of the units had income from Social Security, only 62 percent of those with income less than 50 percent of the poverty threshold had income from Social Security a drop of almost 10 percentage points from the 1990 level. Generally, poor elderly units are less likely than nonpoor elderly units to receive income from pensions and from interest and dividends, and more likely to receive income from AFDC, SSI, general assistance, food stamps, and housing assistance.

Table 10 describes the percent of the total income of elderly units that is derived from various sources, broken down by income level. This table shows that 1.5 percent of total family income for poor units is from earnings, compared with 11.5 percent of nonpoor units. Pension income accounts for 2.8 percent of total income received by poor units, while it comprises 19.9 percent for nonpoor units. Social Security, SSI, AFDC, and general assistance income together represent 79.7 percent of total income for poor units and 40.6 percent for nonpoor units. Interest and dividend income represent 4.2 percent of total income for poor units and 25.6 percent for nonpoor units.

Tables 11 and 12 present the same data as tables 9 and 10, but break all units with all members 65 or over into married couples and unrelated individuals, respectively. Table 11 shows that 4.8 percent of all married couples with all members 65 or over are poor. Social Security and railroad retirement provide 69.2 percent of total income for poor elderly couples, while providing only 38.9 percent of total income for nonpoor couples, who also have substantial shares of income from interest and dividends, pensions, and earnings. Table 12 shows that 24.9 percent of unrelated individuals age 65 or over are poor. Almost one-fourth (24.1 percent) of poor elderly unrelated individuals receive housing assistance, which accounts for 9.2 percent of the total income of this group.

Table 13 shows how the demographic characteristics of elderly households with all members age 65 or over and the composition of their incomes have changed between 1979 and 1991. The 1989 and 1991 data are not comparable to the 1979 data due to processing changes in the CPS. Although the total elderly population is growing—from 12.4 million families in 1979 to 16.5 million families in 1991—the number of poor elderly families has remained generally constant over this time period. However, the percentage of elderly poor individuals aged 75 and over increased significantly, from 48.7 percent in 1979 to 57.6 percent in 1989, and then decreased to 51.4 percent in 1991. The percentage of elderly receiving income from pensions increased for both the poor and the nonpoor, with an increase in receipts from 33 percent in 1979 to 45.7 percent in 1991 for the total elderly population. This increase is also reflected in the increase of the percentage of total income from pensions, from 14.1 percent in 1979 to 19.1 percent in 1991. Over the same time period the percentage of elderly receiving income from AFDC, SSI, and general assistance decreased significantly from 10.0 percent to 6.7 percent. The percentage of all elderly receiving housing assistance increased from 6.1 percent in 1979 to 7.8 percent in 1991. Most notable, however, is that the percentage of poor elderly receiving housing assistance rose from 11.9 percent in 1979 to 22.3 percent in 1991. This is reflected in the increase of the percentage of total incomes of poor elderly from housing assistance which rose from 5.4 percent in 1979 to 8.5 percent in 1991. Overall, average income of the total elderly population increased in real terms from \$11,990 to \$14,619 between 1979 and 1991.

Table 14 provides the same data as tables 9 and 10, but with income levels subdivided by cash income in dollars rather than by the ratio of total income to the poverty threshold.

Table 15 is a comparison of elderly units with all members age 65–79 to all members 80 and over. A higher proportion of 80 and over individuals are female. The 80 and over population also has a much smaller proportion of individuals receiving income from earnings and pensions. Their average income is \$2,300 less per capita than those age 65–79. Table 16 focuses on units in which *any* member is age 65 or over. Table 17 provides information on the percentage distribution of selected sources of income between poor and nonpoor units in which at least one member is age 65 or over. These data include families with an aged member and elderly individuals living alone.

TABLE 9.—PERCENT OF UNITS ¹ WITH ALL MEMBERS AGE 65 OR OVER WITH INCOME FROM VARIOUS SOURCES, BY POVERTY STATUS, ² 1991

	Ratio of total income to poverty threshold								Poor	Nonpoor	Total
	Under 0.50	0.50 to 0.74	0.75 to 0.99	1.00 to 1.24	1.25 to 1.49	1.50 to 1.99	2.00 to 2.99	3.00 and over			
CHARACTERISTICS OF PERSONS											
Number of units (in thousands)	435	669	1,751	1,658	1,364	2,457	3,413	4,709	2,855	13,602	16,456
Percent of units.....	2.6	4.1	10.6	10.1	8.3	14.9	20.7	28.6	17.3	82.7	100.0
Earnings ³	5.9	5.4	4.5	6.3	9.0	10.6	19.1	29.4	5.0	18.5	16.2
OASDI, railroad retirement	61.7	89.3	92.0	96.4	96.7	97.2	97.2	94.1	86.7	96.0	94.4
Pensions	9.1	9.8	8.2	15.1	27.2	45.3	63.0	72.0	8.7	53.5	45.7
Unemployment compensation, workers compensation, veterans payments	3.5	4.2	4.2	6.5	3.9	5.5	7.1	7.9	4.1	6.7	6.2
AFDC, SSI, general assistance	9.8	20.9	31.5	10.2	6.8	2.2	1.2	0.2	25.7	2.7	6.7
Child support, alimony	0.6	1.8	2.4	1.5	3.2	4.0	3.7	4.3	2.0	3.6	3.4
Interest, dividends ³	34.5	36.8	32.5	50.5	63.0	72.4	84.3	95.2	33.8	79.7	71.7
Food stamps	8.2	16.4	25.9	7.2	2.7	0.7	0.4	0.1	21.0	1.4	4.8
Housing assistance	10.6	15.7	27.8	16.5	9.7	6.1	1.8	0.5	22.3	4.7	7.8
CHARACTERISTICS OF PERSONS											
Number of people (thousands)	535	739	1,883	1,919	1,723	3,353	5,127	7,533	3,157	19,655	22,812
Percent white non-Hispanic ⁴	77.8	76.1	73.4	81.6	89.6	92.7	93.7	96.4	74.8	93.0	90.5
Percent black non-Hispanic	17.9	19.6	21.0	12.8	8.0	5.3	5.0	2.3	20.2	5.0	7.1
Percent Hispanic	4.3	4.3	5.6	5.7	2.4	2.0	1.3	1.3	5.1	1.9	2.4
Percent unrelated individuals	62.7	81.1	85.90	73.3	58.7	47.2	33.9	25.9	80.9	39.1	44.9
Percent female	66.5	75.0	79.9	71.2	67.1	63.5	59.3	54.9	76.5	60.2	62.4
Percent age 75 and over	44.7	52.5	52.9	51.5	52.9	48.7	42.4	34.4	51.4	42.2	43.5
Percent female and age 75 and over	33.5	39.0	44.1	38.1	39.0	30.1	23.6	17.0	41.1	24.9	27.2

¹ Includes unrelated individuals (elderly living alone).² Based on census ("Orshansky") poverty levels.³ Negative incomes (i.e., losses) set to zero.⁴ Includes other races.

Note: Details may not sum to totals due to rounding.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

TABLE 10.—PERCENT OF TOTAL UNIT INCOME FROM VARIOUS SOURCES, BY THE RATIO OF TOTAL INCOME TO THE POVERTY THRESHOLD,¹ FOR UNITS WITH ALL MEMBERS AGE 65 OR OVER, 1991

	Ratio of total income to poverty threshold—poverty ratio										Total
	Under 0.50	0.50 to 0.74	0.75 to 0.99	1.00 to 1.24	1.25 to 1.49	1.50 to 1.99	2.00 to 2.99	3.00 and over	Poor	Nonpoor	
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Earnings ²	2.4	2.2	1.3	1.5	3.0	3.2	6.7	15.5	1.5	11.5	11.0
OASDI, railroad retirement.....	58.9	69.0	70.6	79.0	77.7	70.2	54.5	26.0	69.6	40.2	41.6
Pensions.....	4.9	3.8	2.3	3.6	6.0	11.7	19.8	23.2	2.8	19.9	19.1
Unemployment compensation, workers compensation, veterans payments.....	1.5	1.5	0.9	2.0	0.9	1.2	1.4	1.1	1.1	1.2	1.2
AFDC, SSI, general assistance.....	5.3	8.9	10.8	3.8	2.0	0.8	0.2	0.0	10.1	0.4	0.8
Child support, alimony.....	0.2	0.4	0.4	0.2	0.6	1.1	0.8	0.9	0.4	0.9	0.8
Interest, dividends ²	13.0	5.5	3.1	5.4	8.0	11.2	16.5	33.2	4.2	25.6	24.6
Food stamps ³	2.6	1.8	1.9	0.5	0.2	0.0	0.0	0.0	1.9	0.0	0.1
Housing assistance ³	11.2	6.8	8.8	4.1	1.7	0.5	0.1	0.0	8.5	0.3	0.7
Mean cash income per family member ⁴	\$1,287	\$4,356	\$6,057	\$6,940	\$7,745	\$9,178	\$12,147	\$26,346	\$4,851	\$16,188	\$14,619
Mean family size.....	1.2	1.1	1.1	1.2	1.3	1.4	1.5	1.6	1.1	1.4	1.4

¹ Based on census ("Orshansky") poverty levels.

² Negative incomes (i.e., losses) set to zero.

³ The cash value of food stamps and housing assistance were estimated using their market values. Their cash values are excluded from total income for purposes of determining poverty status. Cash values of food stamps and housing assistance are included in total income for calculating the percentage share of total income.

⁴ Includes cash values of food stamps and housing assistance. Incomes not adjusted for losses.

Note: Details may not sum to totals due to rounding.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

TABLE 11.—PERCENT OF MARRIED COUPLES WITH ALL MEMBERS AGE 65 OR OVER WITH INCOME FROM VARIOUS SOURCES, AND PERCENT OF TOTAL FAMILY INCOME FROM EACH SOURCE, BY POVERTY¹ STATUS: 1991

	Percent of couples with income from each source			Percent of total income from each source		
	Total	Poor	Non-poor	Total	Poor	Non-poor
Number of married couples (in thousands).....	5,912	285	5,627	NA	NA	NA
Percent of married couples.....	100.0	4.8	95.2	NA	NA	NA
Earnings ²	21.7	4.3	22.6	12.1	1.8	12.2
OASDI, railroad retirement.....	97.1	82.0	97.8	39.2	69.2	38.9
Pensions.....	60.5	14.5	62.8	20.8	6.6	20.9
Veterans, UC, and other compensation.....	9.0	6.5	9.1	1.2	1.4	1.2
AFDC, SSI, general assistance.....	2.0	18.9	1.2	0.2	6.9	0.1
Child support, alimony.....	3.2	1.0	3.3	0.7	0.4	0.7
Interest, dividends ²	83.3	45.5	85.2	25.8	9.0	25.9
Food stamps ³	1.6	15.9	0.8	0.0	2.3	0.0
Housing assistance ³	1.6	7.2	1.3	0.1	2.4	0.0

¹ Based on Orshansky poverty levels.

² Negative incomes (i.e., losses) set to zero.

³ The cash values of food stamps and housing assistance were estimated using their market values. Their cash values are excluded from total income for purposes of determining poverty status. Cash values of food stamps and housing assistance are included in total income for calculating the percentage share of total income.

NA—Not applicable.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

TABLE 12.—PERCENT OF UNRELATED INDIVIDUALS¹ AGE 65 OR OVER WITH INCOME FROM VARIOUS SOURCES AND PERCENT OF TOTAL INCOME FROM EACH SOURCE, BY POVERTY STATUS:² 1991

	Percent of units with income from each source			Percent of total income from each source		
	Total	Poor	Non-poor	Total	Poor	Non-poor
Number of individuals (in thousands)	10,240	2,553	7,687	NA	NA	NA
Percent of individuals	100.0	24.9	75.1	NA	NA	NA
Earnings ³	12.9	5.0	15.5	9.9	1.5	10.7
OASDI, Railroad retirement	92.8	87.3	94.6	44.4	69.5	41.7
Pensions	37.2	8.1	46.8	17.1	2.3	18.6
Veterans, UC, and other compensation	4.7	3.8	4.9	1.3	1.1	1.3
AFDC, SSI, general assistance	9.0	26.5	3.2	1.5	10.5	0.6
Child support, alimony	3.5	2.0	3.9	1.0	0.4	1.1
Interest, dividends ³	65.3	32.6	76.2	23.2	3.6	25.2
Food stamps ⁴	6.7	21.5	1.7	0.2	1.8	0.1
Housing assistance ⁴	11.4	24.1	7.2	1.5	9.2	0.7

¹ Elderly living alone.² Based on Orshansky poverty levels.³ Negative incomes (i.e., losses) set to zero.⁴ The cash values of food stamps and housing assistance were estimated using their market values. Their cash values are excluded from total income for purposes of determining poverty status. Cash values of food stamps and housing assistance are included in total income for calculating the percentage share of total income.

NA—Not applicable.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

TABLE 13.—TRENDS IN DEMOGRAPHIC CHARACTERISTICS AND INCOME COMPOSITION OF ELDERLY UNITS¹ WITH ALL MEMBERS AGE 65 OR OVER, BY POVERTY STATUS², 1979-1991

	Poor			Nonpoor			Total		
	1979	1989	1991	1979	1989	1991	1979	1989	1991
Number of units (in thousands)	2,619	2,483	2,855	9,786	13,262	13,602	12,405	15,745	16,456
Number of persons (in thousands)	3,002	2,810	3,157	14,301	19,010	19,655	17,303	21,820	22,812
Characteristics of persons:									
Percent white non-Hispanic ³	79.5	74.1	74.8	94.0	93.2	93.0	91.5	90.7	90.5
Percent black non-Hispanic	16.8	20.9	20.2	4.7	4.7	5.0	6.8	6.8	7.1
Percent Hispanic	3.6	5.1	5.1	1.3	2.1	1.9	1.7	2.5	2.4
Percent female	73.9	75.1	76.5	61.4	61.2	60.2	63.6	63.0	62.4
Percent age 75 and over	48.7	57.6	51.4	37.5	41.6	42.2	39.4	43.7	43.5
Percent female and age 75 and over	36.1	44.6	41.1	21.8	25.1	24.9	24.3	27.6	27.2
Percent unrelated individuals	74.7	77.1	80.9	37.8	40.3	39.1	44.2	45.0	44.9
Average family size	1.1	1.1	1.1	1.5	1.4	1.4	1.4	1.4	1.4
Percent with income from various sources:									
Earnings ⁴	5.8	4.6	5.0	22.9	19.4	18.5	19.2	17.1	16.2
OASDI, railroad retirement	86.0	88.7	86.7	94.8	96.0	96.0	92.9	94.9	94.4
Pensions	5.2	7.9	8.7	40.5	49.4	53.5	33.0	42.8	45.7
Unemployment compensation, workers compensation, veterans payments	5.7	4.1	4.1	7.5	6.2	6.7	7.1	5.9	6.2
AFDC, SSI, general assistance	28.4	26.0	25.7	5.1	3.2	2.7	10.0	6.8	6.7
Child support, alimony	1.8	2.3	2.0	2.5	4.4	3.6	2.3	4.1	3.4
Interest, dividends ⁴	37.6	32.9	33.8	81.5	79.6	79.7	72.2	72.2	71.7
Food stamps	20.6	22.4	21.0	1.8	1.7	1.4	5.8	5.0	4.8
Housing assistance	11.9	19.7	22.3	4.6	5.5	4.7	6.1	7.7	7.8

Percent of total income from:

Earnings ⁴	1.3	1.1	1.5	14.5	12.6	11.5	13.7	12.1	11.0
OASDI, railroad retirement	71.3	71.6	69.6	41.5	38.7	40.2	43.5	40.1	41.6
Pensions	1.8	3.0	2.8	15.0	17.6	19.9	14.1	17.0	19.1
Unemployment compensation, workers compensation, veterans payments	2.1	1.1	1.1	1.4	0.9	1.2	1.4	0.9	1.2
AFDC, SSI, general assistance	11.0	9.3	10.1	0.8	0.4	0.4	1.5	0.8	0.8
Child support, alimony	0.4	0.4	0.4	0.5	0.8	0.9	0.5	0.8	0.8
Interest, dividends ⁴	4.2	3.9	4.2	25.5	28.5	25.6	24.0	27.5	24.6
Food stamps ⁵	2.4	2.1	1.9	0.0	0.0	0.0	0.2	0.1	0.1
Housing assistance ⁵	5.4	7.4	8.5	0.8	0.4	0.3	1.1	0.7	0.7
Mean income per family member ⁶	\$4,570	\$4,811	\$4,851	\$13,547	\$16,750	\$16,188	\$11,990	\$15,212	\$14,619

¹ Includes unrelated individuals (elderly living alone).² Based on census ("Orshansky") poverty levels.³ Includes other races.⁴ Negative incomes (i.e., losses) set to zero.⁵ The cash value of food stamps and housing assistance were estimated using their market values. Their cash values are excluded from total income for purposes of determining poverty status. Cash values of food stamps and housing assistance are included in total income for calculating the percentage share of total income.⁶ Includes cash value of food stamps and housing assistance and includes negative incomes (i.e., losses); Mean income converted to 1991 dollars using the CPI-X1 price index.

Note: Details may not sum to totals due to rounding.

Source: March 1980, 1990, 1991, and 1992 Current Population Surveys (CPS). Table prepared by CRS.

TABLE 14.—PERCENT OF UNITS ¹ WITH ALL MEMBERS AGE 65 OR OVER WITH INCOME FROM VARIOUS SOURCES, AND PERCENT OF TOTAL UNIT INCOME FROM VARIOUS SOURCES, BY FAMILY INCOME, ² 1991

	Total family income						Total
	Under \$10,000	\$10,000 to \$19,999	\$20,000 to \$29,999	\$30,000 to \$49,999	\$50,000 to \$74,999	\$75,000 and over	
Number of units (in thousands)	5,567	5,280	2,852	1,742	600	415	16,456
Number of persons (in thousands)	6,077	7,304	4,608	3,004	1,070	750	22,812
Family Characteristics:							
Percent white non-Hispanic ³	80.1	92.1	95.0	96.7	97.3	96.3	90.5
Percent black non-Hispanic	15.2	6.2	3.2	2.0	1.5	2.8	7.1
Percent Hispanic	4.7	1.7	1.8	1.2	1.1	0.9	2.4
Percent female	75.2	62.6	55.7	53.5	51.5	49.8	62.4
Percent age 75 and over	53.3	46.0	37.3	34.7	30.6	30.9	43.5
Percent female age 75 and over	42.3	27.8	18.6	16.6	13.3	13.2	27.2
Percent unrelated individual	83.3	45.0	24.6	17.6	13.2	11.6	44.9
Average family size	1.1	1.4	1.6	1.7	1.8	1.8	1.4
Percent with income from:							
Earnings ⁴	6.1	14.6	21.9	27.4	35.3	56.9	16.2
OASDI, railroad retirement	91.4	97.1	95.5	94.9	92.5	91.9	94.4
Pensions	14.5	50.7	72.1	75.4	73.1	54.7	45.7
Unemployment compensation, workers compensations, veter- ans payments	4.6	6.1	7.8	8.3	8.4	8.0	6.2
AFDC, SSI, general assistance	17.1	2.4	0.6	0.4	0.0	0.0	6.7
Child support, alimony	2.3	4.0	3.2	3.9	4.8	6.7	3.4
Interest, dividends ⁴	44.9	76.1	90.6	97.8	98.0	98.4	71.7
Food stamps ⁵	13.3	0.8	0.2	0.0	0.0	0.0	4.8
Housing assistance ⁵	18.5	4.1	0.7	0.5	0.6	0.0	7.8

Percent of total income from:

Earnings ⁴	2.1	5.3	8.6	11.2	16.9	26.0	11.0
OASDI, railroad retirement	74.1	61.8	44.2	31.0	19.6	10.7	41.6
Pensions	3.9	15.3	24.8	27.1	25.0	13.7	19.1
Unemployment compensation, workers compensation, veterans payments							
AFDC, SSI, general assistance	1.3	1.8	1.5	1.3	0.8	0.8	1.2
Child support, alimony	5.8	0.6	0.1	0.0	0.0	0.0	0.8
Interest, dividends ⁴	0.4	1.0	0.5	0.9	1.3	0.8	0.8
Food stamps ⁵	5.9	14.4	20.3	28.5	36.4	48.0	24.6
Housing assistance ⁵	1.0	0.0	0.0	0.0	0.0	0.0	0.1
Mean income per family member ⁶	5.4	0.2	0.0	0.0	0.0	0.0	0.7
	\$6,309	\$10,439	\$15,075	\$21,742	\$33,751	\$64,060	\$14,619

¹ Included unrelated individuals (elderly living alone).² Family income excludes cash values of food stamps and public housing, and makes no adjustment for negative incomes.³ Includes other races.⁴ Negative incomes (i.e., losses) set to zero.⁵ The cash value of food stamps and housing assistance were estimated using their market values. Their cash values are excluded from total income for purposes of determining poverty status. Cash values of food stamps and housing assistance are included in total income for calculating the percentage share of total income.⁶ Includes cash value of food stamps and housing assistance. Incomes not adjusted for losses.

Note: Details may not sum to totals due to rounding.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

TABLE 15.—COMPARISON OF ELDERLY UNITS ¹ WITH ALL MEMBERS AGE 65 TO 79 TO ALL MEMBERS 80 AND OVER, 1991

Age	Poor		Nonpoor		Total	
	65-79	80+	65-79	80+	65-79	80+
Number of units (in thousands)	1,950	905	10,245	3,357	12,195	4,261
Number of persons (in thousands)	2,191	965	15,537	4,119	17,728	5,084
Characteristics of persons:						
Percent white non-Hispanic ²	71.8	81.4	92.8	93.7	90.2	91.4
Percent black non-Hispanic	22.6	14.5	5.2	4.6	7.3	6.5
Percent Hispanic	5.5	4.1	2.0	1.7	2.4	2.1
Percent female	74.8	80.2	60.1	60.4	61.9	64.2
Percent unrelated individuals.....	79.2	84.7	35.3	53.4	40.8	59.3
Average family size	1.1	1.1	1.5	1.4	1.4	1.3
Percent with income from:						
Earnings ³	6.5	1.7	22.5	6.4	20.0	5.4
OASDI, railroad retirement.....	84.9	90.8	95.4	97.9	93.7	96.4
Pensions.....	9.0	8.2	55.7	46.7	48.2	38.5
UC and other compensation.....	3.9	4.3	7.8	3.4	7.2	3.6
AFDC, SSI, general assistance...	29.0	18.6	2.5	3.4	6.7	6.6
Child support, alimony.....	1.8	2.4	3.5	4.2	3.2	3.8
Interest, dividends ³	32.4	36.8	79.4	80.5	71.9	71.2
Food stamps ⁴	22.2	18.4	1.4	1.3	4.7	4.9
Housing assistance ⁴	24.2	18.4	4.1	6.6	7.3	9.1
Percent of total income from:						
Earnings ³	2.0	0.4	13.5	3.7	13.1	3.4
OASDI, railroad retirement.....	67.2	74.8	38.7	46.2	39.8	48.2
Pensions.....	2.7	3.0	20.7	16.8	20.0	15.8
UC and other compensation.....	1.2	0.9	1.3	0.8	1.3	0.8
AFDC, SSI, general assistance...	11.3	7.4	0.3	0.6	0.8	1.1
Child support, alimony.....	0.4	0.4	0.8	1.1	0.8	1.1
Interest, dividends ³	4.2	4.2	24.4	30.2	23.6	28.4
Food stamps ⁴	2.0	1.7	0.0	0.0	0.1	0.2
Housing assistance ⁴	9.1	7.1	0.3	0.5	0.6	1.0
Mean income per family member ⁵	\$4,795	\$4,976	\$16,596	\$14,652	\$15,137	\$12,815

¹ Includes unrelated individuals (elderly living alone).² Includes other races.³ Negative incomes (i.e., losses) set to zero.⁴ The cash values of food stamps and housing assistance were estimated using their market values. Their cash values are excluded from total income for purposes of determining poverty status. Cash values of food stamps and housing assistance are included in total income for calculating the percentage share of total income.⁵ Includes cash values of food stamps and housing assistance, and includes negative incomes (i.e., losses).

Note: Details may not sum to totals due to rounding.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

TABLE 16.—PERCENT OF UNITS ¹ WITH ANY MEMBER AGE 65 OR OVER WITH INCOME FROM VARIOUS SOURCES, AND PERCENT OF TOTAL UNIT INCOME FROM EACH SOURCE, BY POVERTY ² STATUS, 1991

	Percent of units with income from each source			Percent of unit income from each source		
	Total	Poor	Nonpoor	Total	Poor	Nonpoor
Number of units (in thousands)	23,176	3,420	19,755	NA	NA	NA
Number of aged individuals (in thousands)	30,590	3,781	26,809	NA	NA	NA
Percent of units.....	100.0	14.8	85.2	NA	NA	NA
Earnings ³	32.6	9.7	36.5	29.3	5.5	30.1
OASDI, railroad retirement.....	92.2	84.9	93.5	31.6	64.0	30.5
Pensions.....	45.1	8.9	51.3	15.7	3.1	16.1
Unemployment compensation, workers compensation, veterans payments	9.2	4.5	10.0	1.5	1.4	1.5
AFDC, SSI, general assistance	8.5	27.6	5.2	1.1	11.1	0.7
Child support, alimony.....	5.2	2.9	5.6	0.9	0.7	0.9
Interest, dividends ³	71.3	32.2	78.1	19.4	3.7	20.0
Food stamps ⁴	5.3	23.4	2.1	0.2	3.1	0.1
Housing assistance ⁴	6.1	20.9	3.6	0.4	7.4	0.2

¹ Includes both families and unrelated individuals.

² Based on census ("Orshansky") poverty levels.

³ Negative income (i.e., losses) set to zero.

⁴ The cash values of food stamps and housing assistance were estimated using their market values. Their cash values are excluded from total income for purposes of determining poverty status. Cash values of food stamps and housing assistance are included in total income for calculating the percentage share of total income.

NA—Not applicable.

Note: Details may not sum to totals due to rounding.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

TABLE 17.—PERCENTAGE DISTRIBUTION OF INCOME RECEIVED BY UNITS WITH AN AGED MEMBER ¹ BY FAMILY MONEY INCOME AS A RATIO OF THE POVERTY LEVEL, ² 1991

Type of income	Per- cent re- ceived by units with aged individ- uals	Ratio of total income to poverty threshold										Non- poor
		Total	Under 0.50	0.50 to 0.74	0.75 to 0.99	1.00 to 1.24	1.25 to 1.49	1.50 to 1.99	2.00 to 2.99	3.00 and over		
Total income ³	16.6	100.0	0.2	0.7	2.1	2.8	3.1	7.3	16.7	67.1	3.0	97.0
Social Security and railroad retirement	84.1	100.0	0.5	1.5	4.9	6.5	6.9	14.2	24.0	41.5	6.9	93.1
SSI	39.0	100.0	1.8	7.8	26.2	14.7	9.0	17.7	12.5	10.3	35.8	64.2
AFDC and general assistance	5.4	100.0	11.0	7.5	15.7	17.7	4.9	20.6	15.6	7.0	34.3	65.7
Food stamps ⁴	7.9	100.0	15.1	16.2	34.4	16.7	4.4	7.0	4.2	2.0	65.7	34.3
Unemployment compensation, workers compensation, and veterans payments	18.9	100.0	0.2	1.0	2.0	4.8	2.8	8.9	21.9	58.4	3.2	96.8
Wages, salaries, farm and self-employment	6.2	100.0	0.1	0.2	0.4	0.7	1.3	3.1	11.9	82.5	0.6	99.4
Pensions	61.6	100.0	0.1	0.2	0.5	0.7	1.1	5.1	17.7	74.8	0.7	99.3
Child support, alimony	9.8	100.0	0.6	0.5	1.5	2.3	2.7	9.5	17.8	65.0	2.7	97.3
Interest, dividends ⁵	47.0	100.0	0.1	0.2	0.4	0.8	1.1	3.5	11.2	82.9	0.7	99.3

¹ Includes families with an aged member and aged unrelated individuals living alone. ² Based on census ("Orstansky") poverty levels. ³ Total income excludes cash values of food stamps and public housing and includes losses. ⁴ The cash values of food stamps were estimated using their market values. ⁵ Negative incomes (i.e., losses) set to zero.

Note: This table shows for families with at least one aged member the percentage of selected sources of income received by families classified by poverty level. The first number in the first column, 16.6 percent, means that 16.6 percent of all income accrues to families that include an aged member. The third number in the first row means 0.2 percent of all income received by these families accrues to those families that have an income of less than 50 percent of the poverty level. Details may not sum to totals due to rounding.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

Tables 18 through 20 provide data from the Current Population Survey for 1992. Table 18 shows the distribution of the share of total family income that is accounted for by Social Security income. The tables include all units where the head is age 65 and over, including families and unrelated individuals. For example, for elderly units in poverty, Social Security represents over 90 percent of their income in 48.4 percent of such families. In less than 1 percent of elderly families with income three times the poverty level does Social Security income constitute more than 90 percent of total family income.

Table 19 presents similar information except that it shows the percent of family income derived from supplemental security income (SSI) and Social Security benefits combined.

Table 20 presents the number of families with an aged head with different combinations of SSI, Social Security or railroad retirement, and food stamp income. For families in poverty, 85.6 percent receive Social Security or railroad retirement, 25.1 percent receive SSI, and 22.9 percent receive food stamp benefits. Only 11.5 percent of elderly families under poverty receive all three types of income.

TABLE 18.—SOCIAL SECURITY INCOME AS A PERCENT OF TOTAL UNIT INCOME, BY RATIO OF TOTAL INCOME TO THE POVERTY THRESHOLD,¹ FOR UNITS WITH A HEAD AGE 65 OR OVER, 1991

	[In percent]										
	Ratio of total income to poverty threshold										
	Under 0.50	0.50 to 0.74	0.75 to 0.99	1.00 to 1.24	1.25 to 1.49	1.50 to 1.99	2.00 to 2.99	3.00 and over	Poor	Nonpoor	Total
Number of units (thousands)	533	797	1,951	1,904	1,658	3,008	4,414	7,115	3,281	18,099	21,380
Number of individuals aged 65 and over (thousands)	634	872	2,121	2,188	2,063	3,984	6,304	10,348	3,628	24,887	28,514
Total (percent of units)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Social Security as a percent of total income: ²											
0.1 to 24.9	3.3	2.9	1.1	2.1	2.9	3.5	9.0	39.3	1.9	18.7	16.1
25 to 49.9	7.5	6.0	5.6	7.7	9.8	15.4	33.9	41.5	6.0	28.8	25.3
50 to 79.9	12.9	18.6	22.1	21.0	28.5	43.2	45.2	10.3	19.8	27.1	26.0
80 to 89.9	3.2	10.2	10.3	12.5	16.3	14.8	4.2	0.3	9.2	6.4	6.9
90 or more	34.8	49.8	51.6	52.4	39.0	19.7	3.9	0.3	48.4	13.4	18.8
Percent of units with Social Security income ³	64.3	87.4	90.7	95.7	96.5	96.5	96.2	91.8	85.6	94.5	93.1
Percent of units without Social Security income	35.7	12.6	9.3	4.3	3.5	3.5	3.8	8.2	14.4	5.5	6.9

¹ Based on Census ("Orshansky") poverty levels.

Social Security income may be greater than the sum of percent of units broken down by Social Security income as a percent of total income because the total percent includes units with negative total income who receive Social Security. ⁴ The number 34.8 in the first column means that 34.8 percent of units with a head age 65 or over with total income less than 50 percent of poverty depend upon Social Security benefits for 90 percent or more of their income.

Note: Details may not sum to totals due to rounding.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

TABLE 19.—SOCIAL SECURITY AND SUPPLEMENTAL SECURITY INCOME AS A PERCENT OF TOTAL UNIT INCOME, BY RATIO OF TOTAL INCOME TO THE POVERTY THRESHOLD,¹ FOR UNITS WITH A HEAD AGE 65 OR OVER, 1991

	Ratio of total income to poverty threshold										Total
	Under 0.50	0.50 to 0.74	0.75 to 0.99	1.00 to 1.24	1.25 to 1.49	1.50 to 1.99	2.00 to 2.99	3.00 and over	Poor	Nonpoor	
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Social Security and SSI as a percent of total income: ²											
0.1 to 24.9	1.3	3.1	1.2	1.6	2.8	3.2	8.9	39.4	1.7	18.6	16.0
25 to 49.9	6.3	3.7	2.4	5.5	8.8	14.6	33.5	41.5	3.4	28.3	24.5
0 to 79.9	11.5	12.3	10.4	18.8	26.7	43.4	45.7	10.4	11.1	26.9	24.4
80 to 89.9	4.6	8.1	8.3	12.3	15.8	14.9	4.2	0.4	7.6	6.4	6.6
90 or more.....	41.6	66.8	74.0	59.5	43.5	21.1	4.3	0.3	67.0	14.9	22.9
Percent of units with Social Security and/or SSI income ³	67.9	93.9	96.4	97.7	97.6	97.2	96.5	92.0	91.2	95.1	94.5
Percent of units without Social Security or SSI income	32.1	6.1	3.6	2.3	2.4	2.8	3.5	8.0	8.8	4.9	5.5

¹ Based on census ("Orshansky") poverty levels.

² Total income excludes the cash values of food stamps and public housing assistance.

³ Total percent of units receiving Social Security and/or SSI benefits may be greater than the sum of percents of units broken down by Social Security and SSI income as a percent of total income because the total percent includes units with negative total income who receive Social Security and/or SSI benefits.

⁴ The number 41.6 in the first column means that 41.6 percent of families with a head over age 65 with total incomes less than 50 percent of poverty depend upon Social Security and/or SSI benefits for 90 percent or more of their income.

Note: Details may not sum to totals due to rounding.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

TABLE 20.—RECEIPT OF SOCIAL SECURITY, SUPPLEMENTAL SECURITY INCOME, FOOD STAMPS, AND COMBINATIONS THEREOF, AMONG UNITS ¹ WITH AN AGED HEAD CLASSIFIED BY FAMILY MONEY INCOME AS A PERCENT OF THE POVERTY THRESHOLD, 1991

Type of benefit	Less than 100 percent of poverty threshold		100 to 149.9 percent of poverty threshold	
	Number (in thousands)	Percent	Number (in thousands)	Percent
Social Security ²	2,809	85.6	3,442	96.1
SSI	824	25.1	372	10.4
Food stamps.....	751	22.9	244	6.8
Social Security only ³	1,921	58.6	2,972	83.4
SSI only ³	76	2.3	40	1.1
Food stamps only ³	21	0.6	4	0.1
Social Security and food stamps ⁴	247	7.5	134	3.8
Social Security and SSI ⁴	265	8.1	226	6.4
SSI and food stamps ⁴	107	3.3	16	0.4
All three income sources	377	11.5	90	2.5
No Social Security, SSI, or food stamps.....	269	8.2	81	2.3
Total	3,281		3,562	

¹ Includes unrelated individuals and elderly individuals living alone.

² Includes railroad retirement.

³ Row 4 which is labeled "social security only" means the family only receives social security and does not receive SSI or food stamps. The family could be receiving other types of income. The same is true of rows 5 and 6.

⁴ Family receives only the two types of income specified but not the third. The family could be receiving other sources of income than the three mentioned.

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

HOUSING ARRANGEMENTS OF THE ELDERLY

Table 21 shows housing tenure for poor and nonpoor aged families and unrelated individuals. The table shows that the majority of poor families with an aged member (68 percent) and aged poor unrelated individuals (50 percent) owned their own home or lived with relatives in an owner occupied unit. In comparison, 88 percent of aged nonpoor families and 70 percent of aged nonpoor unrelated individuals owned their own home. Almost one in four (24.1 percent) poor aged unrelated individuals reported living in publicly supported housing (either public housing or rent subsidized housing). About 7 percent of aged nonpoor unrelated individuals lived in publicly supported housing.

TABLE 21.—HOUSING TENURE OF AGED FAMILIES AND UNRELATED INDIVIDUALS BY FAMILY TYPE AND POVERTY STATUS, 1991

	Total (thou- sands)	Percent of total				
		Own housing	No cash rent	Rent housing		
				Total	Publicly supported	Not publicly supported
Any member age 65 or over:						
In families:						
Total	12,936	86.9	1.2	11.9	1.8	10.1
Poor	867	67.7	3.0	29.3	10.6	18.7
Nonpoor.....	12,068	88.3	1.1	10.6	1.2	9.5
Unrelated individuals:						
Total	10,240	65.1	2.6	32.3	11.4	20.9
Poor	2,553	50.2	4.3	45.5	24.1	21.4
Nonpoor.....	7,687	70.1	2.0	27.9	7.2	20.7

Source: March 1992 Current Population Survey (CPS). Table prepared by CRS.

PRESENT VALUES OF SOCIAL SECURITY AND MEDICARE TAXES AND BENEFITS

Many people are interested in comparing the value of Social Security and Medicare benefits to the amount of the payroll taxes and premiums paid to acquire those benefits. However, it must first be understood that the Social Security and Medicare programs are social insurance programs, and they have both social and insurance goals. As with other types of insurance, benefits are paid upon the occurrence of an event such as illness, death, disability, or retirement. Also, benefits are provided without regard to total premium payments so long as basic qualifying conditions have been met regarding insured status. As *social* insurance, Social Security and Medicare are structured to meet social goals, or, in other words, to provide socially adequate benefits. For example, Social Security replaces a higher proportion of the previous earnings of a low-income worker than a high-income worker. It also provides an array of dependents' benefits at no cost for workers with families beyond that paid by workers without dependents.

While this section discusses several ways of comparing benefits to contributions, it should be noted that such comparisons are not suitable for a social insurance program. The worth of social insurance programs cannot be fully assessed on the basis of the individual return on one's contribution because such an analysis does not adequately reflect the social benefits of these programs. Social benefits of the Social Security and Medicare programs include giving a measure of economic independence to the elderly and providing for orphaned children, surviving spouses, and those unable to work due to disability. In addition, younger workers are in large part re-

lieved from the financial burden of supporting their parents, and the elderly are afforded an opportunity to live independently and with dignity.

A comparison of taxes paid to benefits received involves many judgments and caveats and is subject to considerable limitations. The exact relationship of Social Security and Medicare benefits to total taxes and premiums paid is not predictable for each and every worker. For example, some workers may collect Social Security and Medicare benefits for many years after retirement and receive benefits which are many times the value of their taxes and premiums. Other workers, who die before or shortly after retirement and leave no survivors, may collect only a few dollars in benefits or perhaps none at all.

There are several other considerations. First, there really is no "typical" beneficiary with a "typical" work history. The "average" benefit for all workers is the result of millions of different work histories. Second, payroll taxes do not provide retirement benefits only. They also provide benefits for disabled workers and for dependents of retired, disabled, and deceased workers, as well as hospital insurance protection to those over age 65 and the disabled. In fact, only about half of the payroll tax is used to pay cash retirement benefits.

The total amount of benefits paid also depends upon each worker's individual circumstances—whether he or she was a high earner or a low earner, whether he or she is married or has children who are eligible to collect benefits, and how long the worker and his or her dependents collect benefits. Because of the weighted Social Security benefit formula, Social Security benefits are higher in relation to earnings and contributions for a low-wage worker than a high-wage worker. Furthermore, some higher-income retirees have to pay Federal income taxes on up to one-half of their Social Security benefits. Although the Social Security benefit is still paid in full, many people regard benefits taxation as a reduction in benefits.

These variable factors make comparisons problematic and make it virtually impossible to construct an example for a typical and representative worker. However, comparing examples for a range of retirement situations can be informative. Although about three-fourths of workers begin collecting benefits at age 62 and half of beneficiaries coming on the rolls each year are dependents of retired, disabled or deceased workers, for simplicity this analysis uses the following assumptions about hypothetical workers. It assumes that each such worker retired at age 65 in January 1992 after having worked full time in employment covered by Social Security beginning at age 21 (i.e., in 1948). Similarly, all the illustrations reflect three lifetime earnings patterns—workers who always earned either (1) the Federal minimum wage, (2) the average wage in the economy, or (3) the maximum wage subject to Social Security (OASDI) tax. Finally, these illustrations do not take into account the value of additional benefits that may be payable to family members either while the worker is living or after he or she has died, leaving survivors. To offset this, taxes only include HI and the retirement portion of payroll taxes. Taxes do not include the disability and survivor portions of the tax.

The methodology used compares the present value of Social Security and Medicare benefits to the present value of the payroll taxes paid by these workers. In this context, the present value of taxes is all payroll taxes contributed plus the interest that would have accumulated by the time of retirement. The present value of benefits is equal to the amount that would have to be invested at the time of retirement to be sufficient to pay for the benefits projected to be received over the person's expected lifetime. Thus, both past taxes and future benefits are discounted by the actual or assumed interest rate prevailing in each year. The present values for benefits are differentiated by sex because males and females have different life expectancies (males and females reaching age 65 in 1992 have an average life expectancy of about 15 and 19 years, respectively). The calculations do not reflect any income-tax consequences of interest earned (i.e., interest is assumed to be tax-free). Present values are displayed four ways: in dollars, both the present value of benefits and taxes and the difference between the two (the net present value); in a ratio of benefits to taxes; and in "payback" times. The payback time is the amount of time it takes for a retiree to recover through benefit payments everything he or she paid in payroll taxes plus interest, assuming cost-of-living increases and the continued accrual of interest.

The assumptions used regarding projected interest rates, cost-of-living adjustments to benefits, Medicare costs, and life expectancies are those contained in the Alternative II projections of the 1992 Report of the Social Security Board of Trustees. Past interest rates are those earned by the Social Security trust funds in U.S. Government investments.

Present value analysis is very sensitive to interest rates. For example, were the value of taxes paid invested wisely (or luckily), its value may multiply by many times. On the other hand, it is possible that the entire amount could be virtually wiped out by poor investment choices or by a severe and untimely downturn in the stockmarket. A general principle of economics is that the greater the degree of risk, the higher the interest rate. To obtain a middle ground, reflecting reasonable and safe investment practices, it is assumed that Social Security contributions were always placed in U.S. Government obligations. Social Security taxes not immediately needed to pay benefits have always been invested in U.S. Government securities, so to provide illustrations, this analysis uses the effective interest rate earned, or projected to be earned, by the Social Security trust funds over the years. The sensitivity analysis at the conclusion of this section illustrates the sensitivity of these projections to changes in the assumptions used.

In computing the accumulated value of Social Security taxes, the amount of payroll tax used is that portion of the Old-Age and Survivors Insurance (OASI) tax that may be judged solely attributable to the payment of retirement benefits. Using the entire OASI tax would be incorrect because it funds both retirement and survivors benefits, and the benefit analysis in this discussion considers only retirement benefits. Unlike Disability Insurance (DI) and Hospital Insurance (HI) taxes, however, Old-Age Insurance and Survivors Insurance taxes are not separately allocated in the law. To obtain the proportion of the OASI tax attributable to retirement benefits,

it is assumed that if such tax rates were specified they would be in the same proportion to OASI tax rates as retirement benefits are to all benefits funded by the OASI trust fund for each year. On average, about 75 percent of OASI benefits have been retirement benefits. It can be asserted that this methodology understates the value of accumulated taxes because it does not take account of the subsidy provided by workers who die before reaching retirement. This subsidy value is theoretical, and irrelevant here because the examples illustrate cases in the real world where the value of a worker's contributions is what he or she actually paid in Social Security taxes (plus interest). Also, because Social Security taxes are adjusted periodically to take account of current and projected program experience, it can reasonably be assumed that any subsidy effect is reflected in the rate of the OASI tax. The retirement tax rate and the cumulative amount of retirement taxes, plus interest, for the three earnings levels is shown in table 22.

TABLE 22.—CUMULATIVE RETIREMENT PORTION OF SOCIAL SECURITY TAXES PLUS INTEREST, 1948–91

Year	Tax rate (per-cent) ¹	Interest rate (per-cent) ²	Earnings ³			Cumulative taxes plus interest		
			Minimum earner	Average earner	Maximum earner	Minimum earner	Average earner	Maximum earner
1948..	.63	2.832	\$832	\$2,362	\$3,000	\$5	\$15	\$19
1949..	.66	1.299	832	2,483	3,000	11	32	39
1950..	1.02	2.018	1,499	2,544	3,000	27	58	71
1951..	1.05	2.888	1,560	2,799	3,600	44	90	111
1952..	1.05	2.240	1,560	2,973	3,600	61	124	152
1953..	1.09	2.310	1,560	3,139	3,600	80	161	195
1954..	1.47	2.296	1,560	3,156	3,600	105	212	253
1955..	1.51	2.198	1,560	3,301	4,200	131	267	323
1956..	1.53	2.401	1,993	3,532	4,200	165	328	395
1957..	1.55	2.492	2,080	3,642	4,200	202	393	471
1958..	1.55	2.516	2,080	3,674	4,200	240	461	549
1959..	1.74	2.578	2,080	3,856	4,800	282	540	648
1960..	2.11	2.598	2,080	4,007	4,800	334	640	767
1961..	2.09	2.755	2,184	4,087	4,800	390	744	890
1962..	2.19	2.825	2,392	4,291	4,800	454	861	1,022
1963..	2.56	2.923	2,461	4,397	4,800	531	1,000	1,177
1964..	2.55	3.084	2,600	4,576	4,800	615	1,150	1,337
1965..	2.53	3.184	2,600	4,659	4,800	701	1,306	1,503
1966..	2.57	3.483	2,600	4,938	6,600	794	1,480	1,728
1967..	2.60	3.753	2,886	5,213	6,600	900	1,674	1,968
1968..	2.41	3.950	3,293	5,572	7,800	1,017	1,878	2,238
1969..	2.71	4.437	3,328	5,894	7,800	1,154	2,124	2,553
1970..	2.66	5.074	3,328	6,186	7,800	1,303	2,401	2,895
1971..	2.96	5.286	3,328	6,497	7,800	1,473	2,725	3,285
1972..	2.97	5.406	3,328	7,134	9,000	1,655	3,090	3,738
1973..	3.10	5.754	3,328	7,580	10,800	1,856	3,510	4,297
1974..	3.17	6.218	3,883	8,031	13,200	2,098	3,990	4,996

TABLE 22.—CUMULATIVE RETIREMENT PORTION OF SOCIAL SECURITY TAXES PLUS INTEREST, 1948-91—Continued

Year	Tax rate (per-cent) ¹	Interest rate (per-cent) ²	Earnings ³			Cumulative taxes plus interest		
			Minimum earner	Average earner	Maximum earner	Minimum earner	Average earner	Maximum earner
1975..	3.18	6.593	4,368	8,631	14,100	2,380	4,537	5,789
1976..	3.20	6.731	4,784	9,226	15,300	2,698	5,148	6,684
1977..	3.21	6.958	4,784	9,779	16,500	3,045	5,831	7,698
1978..	3.15	7.199	5,512	10,556	17,700	3,444	6,595	8,830
1979..	3.21	7.524	6,032	11,479	22,900	3,904	7,473	10,256
1980..	3.36	8.568	6,448	12,513	25,900	4,464	8,551	12,040
1981..	3.51	9.947	6,968	13,773	29,700	5,165	9,910	14,333
1982..	3.46	11.178	6,968	14,531	32,400	5,997	11,548	17,118
1983..	3.64	10.768	6,968	15,239	35,700	6,910	13,376	20,331
1984..	3.78	11.601	6,968	16,135	37,800	7,990	15,572	24,199
1985..	3.99	11.213	6,968	16,823	39,600	9,180	18,027	28,581
1986..	4.00	11.091	6,968	17,322	42,000	10,491	20,757	33,522
1987..	4.00	10.063	6,968	18,427	43,800	11,840	23,619	38,735
1988..	4.26	9.773	6,968	19,334	45,000	13,308	26,791	44,529
1989..	4.26	9.555	6,968	20,100	48,000	14,891	30,248	50,927
1990..	4.32	9.305	7,670	21,028	51,300	16,623	34,013	57,984
1991..	4.32	9.082	8,606	21,812	53,400	18,521	38,087	65,661

¹ Old-age taxes were derived by applying the ratio of Old-Age benefits/total OASI benefits to the OASI tax rates.

² Interest rates for 1948-91 are from data developed by the Office of the Actuary of SSA.

³ This table uses the average wage series for indexing earnings, for the period 1951 through 1991, developed by SSA in computing benefit amounts. For the period 1948 through 1950, the average wage figures were extrapolated by the Office of the Actuary from the Social Security wage series using Social Security taxable wage data.

Source: Congressional Research Service.

Workers retiring in 1992 at age 65 who always earned either the minimum, average, or maximum wage creditable under Social Security receive a monthly benefit of \$519, \$794 and \$1,088, respectively. As table 26 shows, the present value of benefits substantially exceeds the present value of taxes paid. The *net* present value shows the difference between benefits and taxes.

Many would say that the employer's share of the payroll tax should be included, because it also goes to fund these programs. However, there is not complete consensus concerning who really bears the burden of the payroll tax paid by employers. Some say that employees pay for it in the form of foregone wages. Others maintain that employers absorb part of it and pass the rest along to the general public in the form of higher prices. The resolution of this debate is beyond the scope of this discussion. However, including the employer share approximately doubles the present value of social security taxes and, therefore, approximately halves the ratio of the present value of benefits to taxes.

It is also possible to evaluate the relationship of taxes to benefits for HI—or part A of Medicare. HI is provided by a separately allocated share of the payroll tax, so the accumulated value of its taxes plus interest can be computed as shown in table 23. The annual value of its benefits for aged enrollees has been projected by the Congressional Budget Office, as shown in table 24.

TABLE 23.—CUMULATIVE HI TAXES PLUS INTEREST, 1966–91

Year	Tax rate (per-cent)	Interest rate (per-cent)	Earnings			Cumulative taxes + interest		
			Minimum earner	Average earner	Maximum earner	Minimum earner	Average earner	Maximum earner
1966	0.35	3.483	\$2,600	\$4,938	\$6,600	\$9	\$18	\$24
1967 .....	.50	3.753	2,886	5,213	6,600	24	45	58
1968 .....	.60	3.950	3,293	5,572	7,800	45	81	108
1969 .....	.60	4.437	3,328	5,894	7,800	68	120	161
1970 .....	.60	5.074	3,328	6,186	7,800	92	165	217
1971 .....	.60	5.286	3,328	6,497	7,800	117	213	276
1972 .....	.60	5.406	3,328	7,134	9,000	144	269	347
1973	1.00	5.754	3,328	7,580	10,800	186	362	478
1974 .....	.90	6.218	3,883	8,031	13,200	234	459	630
1975 .....	.90	6.593	4,368	8,631	14,100	290	570	802
1976 .....	.90	6.731	4,784	9,226	15,300	354	694	999
1977 .....	.90	6.958	4,784	9,779	16,500	423	833	1,222
1978	1.00	7.199	5,512	10,556	17,700	511	1,002	1,493
1979	1.05	7.524	6,032	11,479	22,900	615	1,203	1,855
1980	1.05	8.568	6,448	12,513	25,900	738	1,443	2,297
1981	1.30	9.947	6,968	13,773	29,700	907	1,774	2,931
1982	1.30	11.178	6,968	14,531	32,400	1,104	2,172	3,703
1983	1.30	10.768	6,968	15,239	35,700	1,318	2,614	4,590
1984	1.30	11.601	6,968	16,135	37,800	1,567	3,140	5,642
1985	1.35	11.213	6,968	16,823	39,600	1,841	3,731	6,839
1986	1.45	11.091	6,968	17,322	42,000	2,152	4,410	8,240
1987	1.45	10.063	6,968	18,427	43,800	2,475	5,134	9,736
1988	1.45	9.777	6,968	19,334	45,000	2,823	5,930	11,372
1989	1.45	9.559	6,968	20,100	48,000	3,198	6,802	13,187
1990	1.45	9.305	7,670	21,028	51,300	3,610	7,754	15,184
1991	1.45	9.082	8,606	21,812	53,400	4,070	8,788	18,466

Source: Congressional Research Service.

TABLE 24.—PROJECTED ANNUAL HI BENEFITS PER AGED ENROLLEE,¹ BY AGE AND SEX

[Current dollars]

Year	Age	Benefit	
		Male	Female
1992	65	1,194	717
1993	66	1,219	869
1994	67	1,317	1,053
1995	68	1,571	1,271
1996	69	1,597	1,374
1997	70	2,464	1,926
1998	71	2,665	2,407
1999	72	2,738	2,560
2000	73	3,917	2,979
2001	74	4,438	3,285
2002	75	5,147	4,644
2003	76	7,312	4,868
2004	77	10,144	5,984
2005	78	15,434	6,934
2006	79	29,143	8,341
2007	80	.....	10,890
2008	81	.....	15,230
2009	82	.....	21,381
2010	83	.....	40,375
Present value of HI benefits		44,094	54,618

¹ These are for workers only (i.e., does not include those entitled as dependents or survivors) and reflect the different life expectancies of males and females.

Source: Congressional Budget Office projections (January 1993).

The present value of Medicare part A benefits is \$44,094 for a man and \$54,618 for a woman. Unlike Social Security benefits, the amount of HI benefits for which one is eligible is not related to the level of one's earnings. The value of the HI benefits is constant across earnings levels (in reality, however, there may be differences in medicare utilization among the three groups). The HI projections shown in table 26 are based on this assumption. Including the value of the employer share of the taxes cuts these ratios in half.

Combining the Social Security and HI benefits and taxes presents a more complete picture of the relationship of payroll taxes and benefits for retirees. This is also shown in table 26.

The present value of the other part of Medicare—Supplementary Medical Insurance (SMI) or part B—also has been projected by the Congressional Budget Office and is shown in table 25. Including it in an analysis of the relationship of payroll taxes and benefits is problematic, however, because SMI is not financed by the payroll tax. Rather, three-quarters of its cost is borne by general revenues, with the remainder financed by premiums paid by the beneficiaries. It is valid, however, to include SMI as a measure of the value to the elderly of the total Social Security and Medicare benefit package. As displayed in tables 25 and 26, the present value of SMI

benefits was determined after subtracting the cost of the monthly premium.

TABLE 25.—PROJECTED SMI BENEFITS AND PREMIUMS PER AGED ENROLLEE, BY AGE AND SEX

[Current dollars]

Year	Age	Benefit		
		Male	Female	Premium
1992	65	1,105	863	382
1993	66	1,263	1,014	439
1994	67	1,319	1,195	493
1995	68	1,599	1,418	553
1996	69	1,688	1,639	573
1997	70	2,605	2,023	641
1998	71	2,730	2,372	717
1999	72	3,018	2,951	802
2000	73	4,122	3,166	898
2001	74	4,728	3,884	1,005
2002	75	5,732	5,126	1,124
2003	76	7,589	5,900	1,258
2004	77	10,296	6,836	1,408
2005	78	16,820	8,364	1,576
2006	79	19,957	10,381	1,764
2007	80	.....	12,540	1,975
2008	81	.....	16,927	2,211
2009	82	.....	25,063	2,475
2010	83	.....	29,744	2,771
Present value of SMI benefits ¹		34,536	46,879	.....

¹ Net of SMI premium.

Source: Congressional Budget Office Projections (February 1993).

TABLE 26.—PRESENT VALUES OF SOCIAL SECURITY AND HI TAXES AND SOCIAL SECURITY RETIREMENT BENEFITS, HOSPITAL INSURANCE AND SUPPLEMENTARY MEDICAL INSURANCE (PARTS A AND B OF MEDICARE), 1992

	Earnings		
	Minimum earner	Average earner	Maximum earner
PRESENT VALUE OF BENEFITS			
Male:			
Social Security ¹	\$74,407	\$113,860	\$155,994
HI.....	44,094	44,094	44,094
SMI ²	34,536	34,536	34,536
Total.....	153,037	192,490	234,624
Female:			
Social Security ¹	90,166	137,987	189,040
HI.....	54,618	54,618	54,618
SMI ²	46,879	46,879	46,879
Total.....	191,663	239,484	290,537
PRESENT VALUE OF TAXES			
Male and female-employee share:			
Social Security ³	18,527	38,102	65,698
HI.....	4,070	8,788	18,466
Total employee	22,597	46,890	84,164
Total employee and employer	45,194	93,780	168,328
RATIO OF BENEFITS TO COMBINED EMPLOYEE AND EMPLOYER TAXES			
Male:			
Social Security.....	2.01	1.49	1.19
Social Security and HI.....	2.62	1.68	1.19
Social Security, HI and SMI.....	3.39	2.05	1.39
Female:			
Social Security.....	2.43	1.81	1.44
Social Security and HI.....	3.20	2.05	1.45
Social Security, HI and SMI.....	4.24	2.55	1.73
NET PRESENT VALUES—USING COMBINED EMPLOYEE AND EMPLOYER TAXES ⁴			
Male:			
Social Security.....	\$37,353	\$37,656	\$24,598
Social Security and HI.....	73,307	64,174	31,760
Social Security, HI and SMI.....	107,843	98,710	66,296
Female:			
Social Security.....	53,112	61,783	57,644
Social Security and HI.....	99,590	98,825	75,330
Social Security, HI and SMI.....	146,469	145,704	122,209

TABLE 26.—PRESENT VALUES OF SOCIAL SECURITY AND HI TAXES AND SOCIAL SECURITY RETIREMENT BENEFITS, HOSPITAL INSURANCE AND SUPPLEMENTARY MEDICAL INSURANCE (PARTS A AND B OF MEDICARE), 1992—Continued

	Earnings		
	Minimum earner	Average earner	Maximum earner
PAYBACK TIMES—EMPLOYEE TAXES ONLY (YEARS) ⁵			
Male:			
Social Security.....	3.2	4.4	5.6
Social Security and HI.....	3.3	4.8	6.6
Social Security, HI and SMI.....	3.0	4.5	6.2
Female:			
Social Security.....	3.2	4.4	5.6
Social Security and HI.....	3.5	4.9	6.7
Social Security, HI and SMI.....	3.2	4.7	6.4
PAYBACK TIMES—COMBINED EMPLOYEE AND EMPLOYER TAXES (YEARS)			
Male:			
Social Security.....	6.8	9.4	12.2
Social Security and HI.....	6.7	9.8	13.2
Social Security, HI and SMI.....	5.9	8.8	12.0
Female:			
Social Security.....	6.8	9.4	12.2
Social Security and HI.....	7.0	9.8	13.9
Social Security, HI and SMI.....	6.3	9.2	12.6

¹ Retirement benefits at age 65 or full career worker retiring January, 1992.

² Net of projected SMI premiums.

³ The portion of the social security tax attributable to payment of retirement benefits.

⁴ The present value of benefits minus the present value of employee-employer taxes.

⁵ The number of years it takes to recover the present value of taxes paid.

Source: Congressional Research Service.

PRESENT VALUES OF PAST AND FUTURE BENEFITS AND TAXES

For comparative purposes, table 27 shows the present value of Social Security and Medicare taxes and benefits for persons, with work histories similar to those in the previous illustrations, who retired at age 65 in 1980. The values are expressed in 1992 dollars so comparisons can be made on a common base. The table also shows the amount of time it would have taken these persons to recover the value of their Security Security and HI taxes.

TABLE 27.—PRESENT VALUES OF SOCIAL SECURITY AND HI TAXES AND SOCIAL SECURITY RETIREMENT BENEFITS, HOSPITAL INSURANCE AND SUPPLEMENTARY MEDICAL INSURANCE (PARTS A AND B OF MEDICARE), 1980 (1992 DOLLARS)

	Earnings		
	Minimum earner	Average earner	Maximum earner
PRESENT VALUE OF BENEFITS			
Male:			
Social Security ¹	\$63,976	\$97,909	\$124,210
HI.....	21,156	21,156	21,156
SMI ²	10,095	10,095	10,095
Total.....	95,227	129,160	155,461
Female:			
Social Security ¹	75,635	115,755	146,856
HI.....	25,552	25,552	25,552
SMI ²	13,146	13,146	13,146
Total.....	114,333	154,543	185,554
PRESENT VALUE OF TAXES			
Male and female-employee share:			
Social Security ³	6,736	13,152	18,536
HI.....	1,025	2,005	3,092
Total employee.....	7,761	15,157	21,628
Total employee and employer	15,522	30,314	43,256
RATIO OF BENEFITS TO COMBINED EMPLOYEE AND EMPLOYER TAXES			
Male:			
Social Security.....	4.75	3.72	3.35
Social Security and HI.....	5.48	3.93	3.36
Social Security, HI and SMI.....	6.13	4.26	3.59
Female:			
Social Security.....	5.61	4.40	3.96
Social Security and HI.....	6.52	4.66	3.98
Social Security, HI and SMI.....	7.37	5.10	4.29
NET PRESENT VALUES—USING COMBINED EMPLOYEE AND EMPLOYER TAXES ⁴			
Male:			
Social Security.....	\$50,504	\$71,605	\$87,138
Social Security and HI.....	69,610	88,751	102,110
Social Security, HI and SMI.....	79,705	98,846	112,205
Female:			
Social Security.....	62,163	89,451	109,784
Social Security and HI.....	85,665	110,993	129,152
Social Security, HI and SMI.....	98,811	124,229	142,298

TABLE 27.—PRESENT VALUES OF SOCIAL SECURITY AND HI TAXES AND SOCIAL SECURITY RETIREMENT BENEFITS, HOSPITAL INSURANCE AND SUPPLEMENTARY MEDICAL INSURANCE (PARTS A AND B OF MEDICARE), 1980 (1992 DOLLARS)—Continued

		Earnings		
		Minimum earner	Average earner	Maximum earner
PAYBACK TIMES—EMPLOYEE TAXES ONLY (YEARS) ⁵				
Male:				
	Social Security.....	1.1	1.4	1.6
	Social Security and HI.....	1.1	1.5	1.7
	Social Security, HI and SMI.....	1.1	1.5	1.7
Female:				
	Social Security.....	1.1	1.4	1.6
	Social Security and HI.....	1.2	1.5	1.8
	Social Security, HI and SMI.....	1.1	1.5	1.7
PAYBACK TIMES—COMBINED EMPLOYEE AND EMPLOYER TAXES (YEARS)				
Male:				
	Social Security.....	2.2	2.8	3.1
	Social Security and HI.....	2.2	3.0	3.4
	Social Security, HI and SMI.....	2.1	2.9	3.3
Female:				
	Social Security.....	2.2	2.8	3.1
	Social Security and HI.....	2.3	3.0	3.4
	Social Security, HI and SMI.....	2.2	3.0	3.4

¹ Retirement benefits at age 65 or full career worker retiring January, 1980.

² Net of projected SMI premiums.

³ The portion of the social security tax attributable to payment of retirement benefits.

⁴ The present value of benefits minus the present value of employee-employer taxes.

⁵ The number of years it takes to recover the present value of taxes paid.

Source: Congressional Research Service.

The above table reflects historical facts and therefore is straightforward to construct. It is more difficult to portray what benefits likely will be in the future, however. It is possible to use the Trustees' assumptions to determine illustrative Social Security benefits, but projections of Medicare benefits are very problematic. Much more so than for Social Security, Medicare is likely to be substantially altered in the near term because of short-term financing problems, and as part of the general health care reform effort now underway. Also, it is very difficult to predict year-by-year Medicare benefits for a cohort retiring in the future. Accordingly, Medicare benefits are not included in this analysis. Nevertheless, for comparative purposes, table 28 shows illustrations of the projected present values of Social Security taxes and benefits (alone) for people retiring in the year 2000.

TABLE 28.—PRESENT VALUES OF SOCIAL SECURITY TAXES AND BENEFITS, 2000 (1992 DOLLARS)

	Earnings		
	Minimum earner	Average earner	Maximum earner
Present value of benefits: ¹			
Male	\$79,395	\$123,994	\$179,715
Female	95,966	149,864	217,217
Present value of taxes:			
Male and female-employee share ²	25,706	54,580	101,422
Total employee and employer	51,412	109,161	202,844
Ratio of benefits to combined employee and employer taxes:			
Male	1.54	1.13	0.86
Female	1.87	1.37	1.07
Net present values—using combined employee and employer taxes: ³			
Male	\$27,983	\$14,833	—\$23,129
Female	44,554	40,703	14,373
Payback times—employee taxes only (years) ⁴	4.4	6.1	8.0
Payback times—combined employee and employer taxes (years)	9.3	13.2	17.7

¹ Retirement benefits at age 65 or full career worker retiring January, 1992.

² The portion of the Social Security tax attributable to payment of retirement benefits.

³ The present value of benefits minus the present value of employee-employer taxes.

⁴ The number of years it takes to recover the present value of taxes paid.

Source: Congressional Research Service.

Sensitivity analysis

Table 29 shows the sensitivity of the foregoing analysis to certain assumptions. As mentioned earlier, the rate of interest is crucial in determining present values. The table shows the effect on the value of future Social Security, HI, and SMI benefits at different real (i.e., above inflation) interest rates.

Because the projected amount of future benefits depends directly on how long they are received, table 29 also illustrates the effect of different life expectancies on the present value of benefits.

TABLE 29.—SENSITIVITY ANALYSIS FOR MALE WORKERS, 1992 ¹

Discount rate (real)	
Present value of benefits:	
4 percent	\$172,504
3 percent	185,152
2 percent	199,249
1 percent	214,993
Early retirement	
Retire at age 62: ²	
Present value of benefits.....	155,725
Present value of taxes.....	92,599
Ratio	1.68
Life span	
Present value of benefits (Social Security only):	
Average life expectancy.....	113,860
3 years less.....	94,268
3 years more.....	132,160

¹ Benefits in these examples are Social Security, HI, and SMI combined, and taxes include the employer share of Social Security and HI taxes. Examples assume worker always earned average wage.

² The life expectancy of males retiring at age 62 in 1992 is 17.3 years.

Source: Congressional Research Service.

APPENDIX J. POVERTY, INCOME DISTRIBUTION AND ANTIPOVERTY EFFECTIVENESS ¹

This appendix presents statistics which describe the poverty and income of individuals and/or families. It covers the following topics:

- measuring poverty, trends in the overall poverty rate, poverty rates for individuals in selected subgroups, geographic differences in poverty, the working poor;
- antipoverty effectiveness of various cash, near-cash, and non-cash income sources for various family types;
- explanations for the increases in poverty between 1979 and recent years;
- trends in family income and income inequality; and
- international poverty comparisons for families.

MEASURING POVERTY

When the Federal Government began measuring poverty in the early 1960s, the continued existence of poor people in a time of the "Affluent Society" seemed anomalous. Official concern soon translated into efforts to measure the size of the poverty population, and the search began for programmatic ways to alleviate poverty. The first rough estimates of the incidence of poverty were based on survey data indicating that families generally spent about one-third of their income on food. A poverty level income was then calculated by using as a yardstick the amount of money necessary to purchase the lowest cost "nutritionally adequate" diet calculated by the Department of Agriculture (roughly equivalent to the current Thrifty Food Plan). This price tag was multiplied by 3 to produce a poverty threshold. This procedure assumed, then, that if a family did not have enough income to buy the lowest cost nutritionally adequate diet, and twice that amount to buy other goods and services, it was "poor." Adjustments were made for the size of the family, the sex of the family head, and for whether or not the family lived on a farm. Farm families were assumed to need less cash income because their needs could be met partially by farm products, particularly food. The adjustments for sex of the family head and for farm-nonfarm residence were abolished in 1981. Policy officials made one change to the basic approach for calculating the poverty threshold in 1969. The current poverty threshold is established each year simply by increasing the previous year's threshold by the change in the Consumer Price Index (CPI), rather than multiplying the cost of the Thrifty Food Plan by three. The poverty thresholds for selected years are shown in table 2.

¹ See Appendix G and Appendix I for additional poverty data related to individuals in families with children and the elderly.

MEDICAID ¹⁷

Medicaid, authorized under title XIX of the Social Security Act, is a Federal-State matching entitlement program providing medical assistance for low-income persons who are aged, blind, disabled, members of families with dependent children and certain other pregnant women and children. Within Federal guidelines, each State designs and administers its own program. Thus there is substantial variation among the States in terms of persons covered, types and scope of benefits offered, and amounts of payments for services.

Medicaid eligibility is generally linked to eligibility under programs within the jurisdiction of the Committee on Ways and Means, namely AFDC and SSI. Further, some poor aged persons are covered under both the Medicare and Medicaid programs.

ELIGIBILITY

Eligibility for Medicaid has traditionally been linked to actual or potential receipt of cash assistance under the Aid to Families with Dependent Children (AFDC) or Supplemental Security Income (SSI) programs. Legislation in the last decade has gradually extended coverage to low-income pregnant women and children who have no ties to the welfare system, and has provided partial coverage for new groups of low-income Medicare beneficiaries.

Medicaid is available to two broad classes of eligible persons: the "categorically needy" and the "medically needy." The two terms once distinguished between welfare-related beneficiaries and those qualifying only under special Medicaid rules. However, nonwelfare groups have been added to the "categorically needy" list over the years. As a result, the terms are no longer especially helpful in sorting out the various populations for whom mandatory or optional Medicaid coverage has been made available, and some analysts believe they should be abandoned. However, the distinction between the categorically and medically needy is still an important one, because the scope of covered services that States must provide to the categorically needy is much broader than the minimum scope of services for the medically needy.

All States must cover certain mandatory groups of categorically needy individuals.¹⁸ Coverage of additional categorically needy groups is optional, as is coverage of the medically needy. The following discussion describes the mandatory and optional categorically eligible groups within each of the two basic populations served by Medicaid: families with children and the aged, blind, and disabled. The medically needy are discussed separately at the end of this section.

¹⁷ For further information on the Medicaid program see: U.S. Congress, House Committee on Energy and Commerce, Medicaid Source Book: Background Data and Analysis (A 1993 Update), Energy and Commerce Committee Print 103-A. U.S. Govt. Print. Off. January 1993.

¹⁸ Arizona does not operate a traditional Medicaid program. Since 1982 it has operated a federally assisted medical assistance program for low-income persons under a demonstration waiver.

FAMILIES AND CHILDREN

AFDC-related groups

Mandatory.—States must provide Medicaid to all persons receiving cash assistance under AFDC, as well as to additional AFDC-related groups who are not actually receiving cash payments. These groups include: persons who do not receive a payment because the amount would be less than \$10; persons whose payments are reduced to zero because of recovery of previous overpayments; certain work supplementation participants; certain children for whom adoption assistance agreements are in effect or for whom foster care payments are being made under title IV-E of the Social Security Act; and persons ineligible for AFDC because of a requirement that may not be imposed under Medicaid.

States are required to continue Medicaid for specified periods for certain families losing AFDC benefits after receiving them in at least 3 of the preceding 6 months. If the family loses AFDC benefits because of increased income from earnings or hours of employment, Medicaid coverage must be extended for 12 months. (During the second 6 months a premium may be imposed, the scope of benefits may be limited, or alternate delivery systems may be used.) If the family loses AFDC because of increased child or spousal support, coverage must be extended for 4 months. States are also required to furnish Medicaid to certain two-parent families whose principal earner is unemployed and who are not receiving cash assistance because the State is one of those permitted (under the Family Support Act of 1988) to set a time limit on AFDC coverage for such families.

Optional.—States are permitted, but not required, to provide coverage to additional AFDC-related groups. The most important of these are the "Ribicoff children," whose income and resources are within AFDC standards but who do not meet the definition of "dependent child." States may cover these children up to a maximum age of 18, 19, 20, or 21, at the State's option, and may limit coverage to reasonable subgroups, such as children in privately subsidized foster care, or those who live in certain institutional settings. States may also furnish Medicaid to persons who would receive AFDC if the State's AFDC program were as broad as permitted under Federal law.

Non-AFDC pregnant women and children

Beginning in 1986, Congress has extended Medicaid to groups of pregnant women and children who are defined in terms of family income and resources, rather than in terms of their ties to the AFDC program.

Mandatory.—States are required to cover pregnant women and children under age 6 with family incomes below 133 percent of the Federal poverty income guidelines. (The State may impose a resource standard that is no more restrictive than that for SSI, in the case of pregnant women, or AFDC, in the case of children.) Coverage for pregnant women is limited to services related to the pregnancy or complications of the pregnancy; children receive full Medicaid coverage.

Since July 1, 1991, States have been required to cover all children who are under age 19, who were born after September 30, 1983, and whose family income is below 100 percent of the Federal poverty level. (Coverage of such children through age 7 has been optional since OBRA 1987.) The 1983 start date means that coverage of 18-year-olds will take effect during fiscal year 2002.

Optional.—States are permitted, but not required, to cover pregnant women and infants under one year old with incomes below a State-established maximum that is above 133 percent of the poverty level but no more than 185 percent. As of January 1993, 33 States had made use of this option; 24 had set their income limits at the maximum of 185 percent.

AGED AND DISABLED PERSONS

SSI-related groups

Mandatory.—States are generally required to cover recipients of SSI. However, States may use more restrictive eligibility standards for Medicaid than those for SSI if they were using those standards on January 1, 1972 (before the implementation of SSI). States that have chosen to apply at least one more restrictive standard are known as “section 209(b)” States, after the section of the Social Security Amendments of 1972 (Public Law 92-603) that established the option. These States may vary in their definition of disability, or in their standards related to income or resources. There are 12 section 209(b) States:

Connecticut	Minnesota	North Dakota
Hawaii	Missouri	Ohio
Illinois	New Hampshire	Oklahoma
Indiana	North Carolina	Virginia

States using more restrictive income standards must allow applicants to deduct medical expenses from income (not including SSI or State supplemental payments, SSP) in determining eligibility. This process is known as “spenddown.” For example, if an applicant has a monthly income of \$400 (not including any SSI or SSP) and the State’s maximum allowable income is \$350, the applicant would be required to incur \$50 in medical expenses before qualifying for Medicaid. As will be discussed below, the spenddown process is also used in establishing medically needy eligibility.

States must continue Medicaid coverage for several defined groups of individuals who have lost SSI or SSP eligibility. The “qualified severely impaired” are disabled persons who have returned to work and have lost eligibility as a result of employment earnings, but still have the condition that originally rendered them disabled and meet all non-disability criteria for SSI except income. Medicaid must be continued if such an individual needs continued medical assistance to continue employment and the individual’s earnings are insufficient to provide the equivalent of SSI, Medicaid, and attendant care benefits the individual would qualify for in the absence of earnings. States must also continue Medicaid coverage for persons who were once eligible for both SSI and Social Security payments and who lose SSI because of a cost of living adjustment (COLA) in their Social Security benefits. Similar Medicaid continuations have been provided for certain other persons who lose SSI as

a result of eligibility for or increases in Social Security or veterans' benefits. Finally, States must continue Medicaid for certain SSI-related groups who received benefits in 1973, including "essential persons" (persons who care for a disabled individual).

Optional.—States are permitted to provide Medicaid to individuals who are not receiving SSI but are receiving State-only supplementary cash payments.

Qualified Medicare beneficiaries and related groups

Mandatory.—Effective January 1, 1991, States must provide limited Medicaid coverage for "qualified Medicare beneficiaries" (QMBs). These are aged and disabled persons who are receiving Medicare, whose income is below 100 percent of the Federal poverty level, and whose resources do not exceed twice the allowable amount under SSI. States must pay Medicare part B premiums (and, if applicable, part A premiums) for QMBs, along with required Medicare coinsurance and deductible amounts.

Effective January 1, 1993, all States must pay part B premiums (but not part A premiums or part A or B coinsurance and deductibles) for beneficiaries who would be QMBs except that their incomes are between 100 percent and 110 percent of the poverty level; the upper limit rises to 120 percent on January 1, 1995.

States are also required to pay part A premiums, but no other expenses, for "qualified disabled and working individuals." These are persons who formerly received Social Security disability benefits and hence Medicare, have lost eligibility for both programs, but are permitted under Medicare law to continue to receive Medicare in return for payment of the part A premium. Medicaid must pay this premium on behalf of such individuals who have incomes below 200 percent of poverty and resources no greater than twice the SSI standard.

Optional.—States are permitted to provide full Medicaid benefits, rather than just Medicare premiums and cost-sharing, to QMBs who meet a State-established income standard that is no higher than 100 percent of the Federal poverty level.

Institutionalized persons and related groups (all optional)

States may provide Medicaid to certain otherwise ineligible groups of persons who are in nursing facilities or other institutions, or who would require institutional care if they were not receiving alternative services at home or in the community.

States may establish a special income standard for institutionalized persons, not to exceed 300 percent of the maximum SSI benefits payable to a person who is living at home and has no other resources. States may also provide Medicaid to persons who would qualify for SSI but for the fact that they are in an institution.

A State may obtain a waiver under section 2176 of OBRA 1981 to provide home and community-based services to a defined group of individuals who would otherwise require institutional care. Persons served under such a waiver may receive Medicaid coverage if they would be eligible if in an institution. Such individuals may also be covered in a State that terminates its waiver program in order to take advantage of a new, no-waiver home and community-based services option created by OBRA 1990.

A State may also provide Medicaid to several other classes of persons who need the level of care provided by an institution and would be eligible if they were in an institution. These include children who are being cared for at home, persons of any age who are ventilator-dependent, and persons receiving hospice benefits in lieu of institutional services.

THE MEDICALLY NEEDEY (ALL OPTIONAL)

Forty-one States and other jurisdictions provide Medicaid to at least some groups of "medically needy" persons. These are persons who meet the nonfinancial standards for inclusion in one of the groups covered under Medicaid, but who do not meet the applicable income or resource requirements for categorically needy eligibility. The State may establish higher income or resource standards for the medically needy. In addition, individuals may spend down to the medically needy standard by incurring medical expenses, in the same way that SSI recipients in section 209(b) States may spend down to Medicaid eligibility. For the medically needy, spenddown may involve the reduction of assets, as well as of income.

The State may set its separate medically needy income standard for a family of a given size at any level up to 133⅓ percent of the maximum payment for a similar family under the State's AFDC program. States may limit the groups of individuals who may receive medically needy coverage. If the State provides any medically needy program, however, it must include all children under 18 who would qualify under one of the mandatory categorically needy groups, and all pregnant women who would qualify under either a mandatory or optional group, if their income or resources were lower.

As of October 1, 1992, the following States covered some groups of the medically needy:

American Samoa	Maryland	Pennsylvania
Arkansas	Massachusetts	Puerto Rico
California	Michigan	Rhode Island
Connecticut	Minnesota	South Carolina
District of Columbia	Montana	Tennessee
Florida	Nebraska	Texas
Georgia	New Hampshire	Utah
Hawaii	New Jersey	Vermont
Illinois	New York	Virgin Islands
Iowa	North Carolina	Virginia
Kansas	North Dakota	Washington
Kentucky	Northern Mariana Islands	West Virginia
Louisiana	Oklahoma	Wisconsin
Maine	Oregon	

MEDICAID AND THE POOR

In 1990, Medicaid covered 10.6 percent of the total U.S. population (excluding institutionalized persons) and 47 percent of those with incomes below the Federal poverty level. Because categorical eligibility requirements for children are less restrictive than those for adults, poor children are much more likely to receive coverage. Table 13 shows Medicaid eligibility by age and income status in 1991, as reported in the March 1992 Current Population Survey (CPS) conducted by the Census Bureau. Note that persons shown as

receiving Medicaid may have had other health coverage as well. Nearly all the elderly, for example, have Medicare and/or private coverage.

Children under age 6 with family incomes below poverty are most likely to be covered. Coverage rates drop steadily with age and income until age 65.

TABLE 13.—MEDICAID COVERAGE BY AGE AND INCOME STATUS, 1991

[All numbers are in thousands]

Age	Medicaid	Total	Percent with Medicaid
Poor:			
0 to 5	4,261	5,702	74.7
6 to 18	5,358	9,257	57.9
19 to 44	4,779	12,662	37.7
45 to 64	1,301	4,306	30.2
65 and over	1,187	3,781	31.4
Total	16,888	35,708	47.3
Family income between 100 and 133 percent of poverty:			
0 to 5	684	1,858	36.8
6 to 18	880	3,218	27.3
19 to 44	883	5,601	15.8
45 to 64	338	1,946	17.3
65 and over	522	2,931	17.8
Total	3,306	15,554	21.3
Family income between 133 percent and 185 percent of poverty:			
0 to 5	565	2,709	20.8
6 to 18	632	5,284	12.0
19 to 44	808	9,834	8.2
45 to 64	293	3,407	8.6
65 and over	409	4,511	9.1
Total	2,706	25,745	10.5
Family income greater than 185 percent of poverty:			
0 to 5	657	12,937	5.1
6 to 18	741	28,147	2.6
19 to 44	1,181	75,215	1.6
45 to 64	488	38,516	1.3
65 and over	773	19,368	4.0
Total	3,840	174,183	2.2
All individuals:			
0 to 5	6,168	23,206	26.6
6 to 18	7,610	45,906	16.6
19 to 44	7,651	103,312	7.4
45 to 64	2,420	48,175	5.0
65 and over	2,891	30,590	9.5
Total	26,739	251,190	10.6

Source: Current Population Survey (CPS), Annual March Income Supplement. Table prepared by CRS. The table excludes persons in institutions and approximately 300,000 children under age 15 whose income was not reported. The Medicaid counts are lower than those reported by HCFA, because some beneficiaries fail to report their coverage on the CPS. Some may also underreport their income. In addition, the income used to determine poverty status in this table includes cash welfare, while Medicaid eligibility is based on income prior to the receipt of welfare benefits.

SERVICES

States are required to offer the following services to categorically needy recipients under their Medicaid programs: inpatient and outpatient hospital services; laboratory and X-ray services; nursing facility (NF) services for those over age 21; home health services for those entitled to NF care; early and periodic screening, diagnosis, and treatment (EPSDT) for those under age 21; family planning services and supplies; physicians' services, and nurse-midwife services. OBRA 1989 required States to provide ambulatory services offered by federally qualified health centers, effective April 1, 1990, and services furnished by certified family or pediatric nurse practitioners, effective July 1, 1990. States may also provide additional medical services such as drugs, eyeglasses, inpatient psychiatric care for individuals under age 21 or over 65 (see table 25). OBRA 1990 added two new optional services: home and community-based services for the functionally disabled elderly and community supported living arrangement services for the developmentally disabled. Total expenditures under these services are capped. States are permitted to establish limitations on the amount of care provided under a service category (such as limiting the number of days of covered hospital care or number of physicians' visits). Certain services to children may not be limited.

Federal law establishes the following requirements for coverage of the medically needy: (1) if a State provides medically needy coverage to any group it must provide ambulatory services to children and prenatal and delivery services for pregnant women; (2) if a State provides institutional services for any medically needy group it must also provide ambulatory services for this population group; and (3) if the State provides medically needy coverage for persons in intermediate care facilities for the mentally retarded (ICF/MRs) or institutions for mental diseases, it must offer to all groups covered in its medically needy program the same mix of institutional and noninstitutional services as required under prior law (that is, either all of the mandatory services or alternatively the care and services listed in 7 of the 25 paragraphs in the law defining covered services).

FINANCING

The Federal Government helps States share in the cost of Medicaid services by means of a variable matching formula which is adjusted annually. The matching rate, which is inversely related to a State's per capita income, can range from 50 percent to 83 percent though currently the highest rate is 79.01 percent. Federal matching for the territories is set at 50 percent with a maximum dollar limit placed on the amount each territory can receive. The Federal share of administrative costs is 50 percent for all States except for certain items where the authorized rate is higher.

REIMBURSEMENT POLICY

States establish their own service reimbursement policies within general Federal guidelines. OBRA 1989 codified the regulatory requirement that payments must be sufficient to enlist enough providers so that covered services will be available to Medicaid beneficiaries at least to the extent they are available to the general population in a geographic area. Beginning April 1, 1990, States are required to submit to the Secretary their payment rates for pediatric and obstetrical services along with additional data that will assist the Secretary in evaluating the State's compliance with this requirement.

Until 1980, States were required to follow Medicare rules in paying for institutional services. The Boren amendment, enacted with respect to nursing homes in 1980 and extended to hospitals in 1981, authorized States to establish their own payment systems, as long as rates were reasonable and adequate to meet the costs of efficiently and economically operated facilities. Rates for hospitals must also be sufficient to assure reasonable access to inpatient services of adequate quality. A Supreme Court ruling in 1990, *Wilder v. Virginia Hospital Association*, affirmed that hospitals have the right under this rule to seek Federal court review of State reimbursement levels. Suits alleging inadequate hospital and nursing home payment have been filed in a number of States.

In addition to meeting general adequacy tests, State hospital reimbursement systems must provide for additional payments to facilities serving a disproportionate share of low-income patients. Unlike the comparable Medicare payments, Medicaid payments must follow a formula that considers a hospital's charity patients as well as its Medicaid caseload.

OBRA 1990 established new rules for Medicaid reimbursement of prescription drugs. The law requires State Medicaid programs to cover nearly all the drugs manufactured by a firm entering into a rebate agreement, and denies Federal matching funds for drugs manufactured by a firm that has not agreed to provide rebates. Under amendments made by the Veterans Health Care Act of 1992, a manufacturer is not deemed to have a rebate agreement unless the manufacturer has entered into a master agreement with the Secretary of Veterans Affairs. Rebate amounts vary depending on the nature of the drug. The minimum rebate is 10 percent of the average price. OBRA 1990 established a 4-year moratorium on reductions in most payment rates for pharmacists.

Practitioners and providers are required to accept payments under the program as payment in full for covered services except where nominal cost-sharing charges may be required. States may generally impose such charges with certain exceptions. They are precluded from imposing such charges on services for children under 18, services related to pregnancy, family planning or emergency services, HMO services for the categorically needy, and services provided to SNF or ICF inpatients who are required to spend all of their income for medical care except for a personal needs allowance.

ADMINISTRATION

Medicaid is a State-administered program. At the Federal level, the Health Care Financing Administration (HCFA) of the Department of Health and Human Services is responsible for overseeing State operations.

Federal law requires that a single State agency be charged with administration of the Medicaid program. Generally, that agency is either the State welfare agency, the State health agency, or the umbrella human resources agency. The single State agency may contract with other State entities to conduct some program functions. Further, States may process claims for reimbursement themselves or contract with fiscal agents or health insuring agencies to process these claims.

RECENT LEGISLATIVE CHANGES

The following is a summary of the major Medicaid changes enacted as part of the Omnibus Budget Reconciliation Act of 1990 (OBRA 1990), Public Law 101-508:

1. *Reimbursement for prescribed drugs.*—The law requires manufacturers of prescription drugs to provide rebates to State Medicaid programs. States will be required to cover all the drugs manufactured by a firm entering into a rebate agreement. The minimum rebate is 10 percent of the average manufacturer price for the product. Beginning in 1993, States are required to have prospective (i.e., point-of-sale) and retrospective drug utilization review (DUR) programs, to assure that prescriptions are appropriate and medically necessary. Until the end of 1993, enhanced Federal matching payments are provided for State administrative costs related to the rebate and DUR programs. The law establishes a 4-year moratorium on reductions in most payment rates for pharmacists.

2. *Required payment of premiums and cost-sharing for enrollment under group health plans where cost-effective.*—Effective January 1, 1991, the law requires States to pay premiums for group health plans for which Medicaid beneficiaries are eligible, when it is cost-effective to do so. Guidelines for determining cost-effectiveness are to be issued by the Secretary. States will pay any cost-sharing required by a plan and continue to furnish any Medicaid benefits not covered under the plan. Providers under group health plans will be required to accept plan payment as payment in full for Medicaid enrollees.

3. *Protection of low-income Medicare beneficiaries.*—The law accelerates phase-in of the requirement that States pay Medicare premiums and cost-sharing for QMBs, Medicare beneficiaries with incomes below 100 percent of the Federal poverty level; for all but 5 States, the requirement was effective January 1, 1991. All States must pay part B premiums (but not part A premiums or cost-sharing) for beneficiaries with incomes below 110 percent of the poverty level in 1993 and below 120 percent in 1995.

4. *Child health provisions.*—Effective July 1, 1991, all States are required to cover children under age 19 who were born after September 30, 1983, and whose family income is below 100 percent of the Federal poverty level. States are required to accept Medicaid applications for mothers and children at locations other than wel-

fare offices, and are required to continue benefits for pregnant women until 2 months after the end of the pregnancy, and for infants through the first year of life. States are required to make additional payments for outlier cases and are prohibited from imposing durational limits on coverage for patients who are under age 1 in any hospital or under age 6 in a disproportionate share hospital.

5. *Home and community-based care as optional service.*—The law permits States to provide home and community-based services to functionally disabled Medicaid beneficiaries aged 65 or over, effective the later of July 1, 1991, or 30 days after the publication of interim rules. States will be permitted to limit eligibility for the services without waivers and thus to provide the services without meeting cost-effectiveness tests. Federal matching payments cannot exceed 50 percent of what it would have cost to provide Medicare nursing facility care to the same group of beneficiaries. Total Federal expenditures will be limited to \$580 million over the period fiscal years 1991 to 1995.

6. *Community supported living arrangements.*—The law permits between two and eight States to provide community supported living arrangement services to developmentally disabled individuals who live with their families or in small community residential settings, effective the later of July 1, 1991, or 30 days after the publication of interim rules. Services will include personal assistance, training and habilitation, and other services needed to help with activities of daily living. Total Federal expenditures will be limited to \$100 million over the period fiscal years 1991 to 1995.

7. *Payments for COBRA continuation coverage.*—The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA, Public Law 99-272) provides that employees or dependents leaving an employee health insurance group in a firm with 20 or more employees must be offered an opportunity to continue buying insurance through the group for 18 to 36 months (depending on the reason for leaving the group). OBRA 1990 permits State Medicaid programs to pay for COBRA continuation coverage, when it is cost effective to do so, effective January 1, 1991. States may pay premiums for individuals with incomes below 100 percent of poverty and resources less than twice the SSI limit who are eligible for continuation coverage under a group health plan offered by an employer with 75 or more employees.

8. *Miscellaneous.*—The law establishes demonstration projects in three to four States to test the effect of providing Medicaid to families with incomes below 150 percent of the Federal poverty level that do not meet categorical eligibility requirements, and projects in two States to provide Medicaid coverage for early intervention services for HIV-infected individuals who do not meet disability criteria. The law also includes new measures to ensure the quality of physician services under Medicaid, technical corrections in nursing home reform provisions, and numerous other technical and miscellaneous amendments.

The following is a summary of the major changes enacted in the Medicaid Voluntary Contribution and Provider-Specific Tax Amendments of 1991, Public Law 102-234.

1. *Voluntary contributions and provider-specific taxes.*—The law caps Federal matching payments for State Medicaid spending that

is financed with revenues from provider donations or taxes. Generally effective January 1, 1992, before the Federal share is computed, a State's expenditures for Medicaid are reduced by revenues received by a State or local government from provider-related donations, and health care related taxes that are not broad based. Broad based taxes are those that are uniformly imposed on all providers in a class, or all business in a class furnished by the providers. States with non-broad based taxes in effect or approved as of November 22, 1991, are permitted to continue them temporarily, but the taxes may not be increased. States with voluntary contribution programs in effect or reported as of September 30, 1991, for States' fiscal year 1992, may continue them temporarily but may not increase them. During fiscal year 1993-95, Federal matching funds for revenue from voluntary contributions, provider specific taxes, and broad based taxes will be limited to the greater of 25 percent of the State share of Medicaid expenditures or the amount of donations and taxes collected in the State in fiscal year 1992.

Federal matching funds are allowable for certain donations. These are bona fide provider donations that are not related to Medicaid payments to the provider, and donations in the form of payment for outstationing Medicaid eligibility workers. Beginning in fiscal year 1993, the latter type of donations will be limited to 10 percent of a State's Medicaid administrative costs.

2. *Payments for disproportionate share hospitals.*—The law places an aggregate national cap of 12 percent of Medicaid expenditures on payment adjustments for disproportionate share hospitals (DSH). Beginning with fiscal year 1993, a national DSH payment limit is projected, and each State receives a DSH allotment for the fiscal year; Federal matching payments will be denied for DSH payments that exceed a State's annual allotment. For the part of fiscal year 1992 beginning on or after January 1, 1992, Federal matching payments will be made only for DSH adjustments paid in accordance with a State plan in effect or submitted by September 30, 1991, or November 26, 1991, if the State has used specific criteria to designate a hospital as DSH. Higher payments are permitted if necessary to meet the minimum adjustments required by Medicaid law.

Two 1991 acts concern enrollment in two health maintenance organizations. The law specifies that no more than 75 percent of the enrollees of an HMO may be Medicaid or Medicare beneficiaries. Public Law 102-276 authorized a waiver of this requirement for the Dayton Area Health Plan. Public Law 102-317 authorized a similar waiver for the Tennessee Primary Care Network.

The following is a summary of major Medicaid changes enacted in the Veterans Health Care Act of 1992, Public Law 102-585, pertaining to Medicaid reimbursement policies for prescription drugs.

1. *Calculation of best price.*—The law excludes certain prices from calculation of best price (the lowest price available from a manufacturer) for Medicaid drug rebates. The law excludes the prices charged to the Indian Health Service, the Department of Veterans Affairs, veterans' State homes, the Department of Defense, the Public Health Service and certain private and nonprofit hospitals, as well as any prices charged under the Federal Supply

Schedule of the General Services Administration or under State pharmaceutical assistance programs.

2. *Rebate amounts.*—The law changes the minimum basic rebates for brand name drugs to 15.7 percent of the average manufacturer price (AMP) in calendar year 1993, 15.4 percent of the AMP in 1994, 15.2 percent of the AMP in 1995, and 15.1 percent of the AMP thereafter. In each calendar year, the basic rebate is the greater of the percentage stated, or the difference between the AMP and the best price.

PROGRAM DATA

Under current law, Federal Medicaid outlays are projected to reach \$91.9 billion in fiscal year 1994, a 14.4 percent increase over the \$80.3 billion projected for fiscal year 1993. Medicaid program data are presented in the following tables 14-25.

TABLE 14.—HISTORY OF MEDICAID PROGRAM COSTS

Fiscal year	Total			Federal			State		
	Dollars (in millions)	Percent increase		Dollars (in millions)	Percent increase		Dollars (in millions)	Percent increase	
1966 ¹	\$1,658	.....		\$789	.....		\$869	.....
1967 ¹	2,368	42.8		1,209	53.2		1,159	33.4	
1968 ¹	3,686	55.7		1,837	51.9		1,849	59.5	
1969 ¹	4,166	13.0		2,276	23.9		1,890	2.2	
1970 ¹	4,852	16.5		2,617	15.0		2,235	18.3	
1971.....	6,176	27.3		3,374	28.9		2,802	25.4	
1972 ²	8,434	36.6		4,361	29.3		4,074	45.4	
1973.....	9,111	8.0		4,998	14.6		4,113	1.0	
1974.....	10,229	12.3		5,833	16.7		4,396	6.9	
1975.....	12,637	23.5		7,060	21.0		5,578	26.9	
1976.....	14,644	15.9		8,312	17.7		6,332	13.5	
TQ ³	4,106	NA		2,354	NA		1,752	NA	
1977.....	17,103	⁴ 16.8		9,713	⁴ 16.9		7,389	⁴ 16.7	
1978.....	18,949	10.8		10,680	10.0		8,269	11.9	
1979.....	21,755	14.8		12,267	14.9		9,489	14.8	
1980.....	25,781	18.5		14,550	18.6		11,231	18.4	
1981.....	30,377	17.8		17,074	17.3		13,303	18.4	
1982.....	32,446	6.8		17,514	2.6		14,931	12.2	
1983.....	34,956	7.7		18,985	8.4		15,971	7.0	
1984.....	37,569	7.5		20,061	5.7		17,508	9.6	
1985 ⁵	40,917	8.9		⁶ 22,655	12.9		⁶ 18,262	4.3	

1986.....	44,851	9.6	24,995	10.3	19,856	8.7
1987.....	49,344	10.0	27,435	9.8	21,909	10.3
1988.....	54,116	9.7	30,462	11.0	23,654	8.0
1989.....	61,246	13.2	34,604	13.6	26,642	12.6
1990.....	772,145	17.8	41,103	18.8	31,042	16.5
1991.....	794,525	31.0	52,532	27.8	41,938	35.3
1992 ⁸	118,155	25.0	67,827	29.1	50,339	19.9
1993 (current law estimate).....	140,263	18.7	80,511	18.7	59,752	18.7
1994 (current law estimate).....	160,678	14.6	92,229	14.6	68,449	14.6

¹ Includes related programs which are not separately identified though for each successive year a larger portion of the total represents Medicaid expenditures. As of Jan. 1, 1970, Federal matching was only available under Medicaid.

² Intermediate care facilities (ICFs) transferred from the cash assistance programs to Medicaid effective January 1, 1972; data for prior periods do not include these costs.

³ Transitional quarter (beginning of Federal fiscal year moved from July 1 to Oct. 1).

⁴ Represents increase over fiscal year 1976, i.e., five calendar quarters.

⁵ Includes transfer of function of State fraud control units to Medicaid from Office of Inspector General.

⁶ Temporary reductions in Federal payments authorized for fiscal years 1982-84 were discontinued in fiscal year 1985.

⁷ Based on total Federal and State costs as reported by the States on the form HCFA-64, Quarterly Medicaid Statement of Expenditures for the Medical Assistance Program, net of financial adjustments.

⁸ Preliminary.

Note: Totals may not add due to rounding.

Source: "Budget of the U.S. Government" fiscal years 1969-93, Health Care Financing Administration, Division of Budget, and Congressional Budget Office.

TABLE 15.—UNDUPPLICATED NUMBER OF MEDICAID RECIPIENTS BY ELIGIBILITY CATEGORY, FISCAL YEARS 1972-91

[Number in thousands]

Fiscal year	Total	Aged 65 or over	Blindness	Permanent and total disability	Dependent children under age 21	Adults in families with dependent children	Other ¹
1972	17,606	3,318	108	1,625	7,841	3,137	1,576
1973	19,622	3,496	101	1,804	8,659	4,066	1,495
1974	21,462	3,732	135	2,222	9,478	4,392	1,502
1975	22,007	3,615	109	2,355	9,598	4,529	1,800
1976	22,815	3,612	97	2,572	9,924	4,774	1,836
1977 ²	22,832	3,636	92	2,710	9,651	4,785	1,959
1978	21,965	3,376	82	2,636	9,376	4,643	1,852
1979	21,520	3,364	79	2,674	9,106	4,570	1,727
1980 ³	21,605	3,440	92	2,819	9,333	4,877	1,499
1981 ³	21,980	3,367	86	2,993	9,581	5,187	1,364
1982 ³	21,603	3,240	84	2,806	9,563	5,356	1,434
1983 ³	21,554	3,371	77	2,844	9,535	5,592	1,129
1984 ³	21,507	3,238	79	2,834	9,684	5,600	1,187
1985 ³	21,814	3,061	80	2,937	9,757	5,518	1,214
1986 ³	22,515	3,140	82	3,100	10,029	5,647	1,362
1987 ³	23,109	3,224	85	3,296	10,168	5,599	1,418
1988 ³	22,907	3,159	86	3,401	10,037	5,503	1,343
1989 ³	23,511	3,132	95	3,496	10,318	5,717	1,175
1990 ⁴	25,255	3,202	83	3,635	11,220	6,010	990
1991 ⁴	28,280	3,359	85	3,983	13,415	6,778	658

¹ This category is composed predominantly of children not meeting the definition of "dependent" children, e.g., "Ribicoff children." ² Fiscal year 1977 began in October 1976 and was the first year of the new Federal fiscal cycle. Before 1977, the fiscal year began in July. ³ Beginning in fiscal year 1980, recipients' categories do not add to the unduplicated total due to the small number of recipients that are in more than one category during the year. ⁴ Recipients' categories do not add to the unduplicated total due to "unknowns".

Source: HCFA, BOMS, OSDM, Division of Medicaid Statistics, Fiscal Years 1972-1990, Office of the Actuary, Fiscal years 1991 and beyond.

TABLE 16.—MEDICAID RECIPIENTS BY BASIS OF ELIGIBILITY BY STATE: FISCAL YEAR 1991

State	Total recipients ¹	Aged	Blind	Disabled	AFDC children	AFDC adults	Other title XIX ²
Alabama.....	403,255	68,370	1,549	89,132	158,033	79,865	5,209
Alaska.....	51,288	3,368	84	4,318	28,284	15,234	0
Arizona.....	313,142	18,959	595	34,919	183,618	75,051	0
Arkansas.....	284,674	45,896	1,302	57,355	98,292	49,086	32,743
California.....	4,019,084	456,700	23,740	562,475	1,768,004	1,134,615	40,643
Colorado.....	223,444	31,813	172	30,330	100,854	56,225	4,047
Connecticut.....	271,903	43,085	515	67,926	122,430	4,481	33,466
Delaware.....	50,680	5,038	107	7,393	24,819	12,007	1,198
District of Columbia.....	100,065	11,426	5	15,194	50,702	22,662	76
Florida.....	1,248,883	174,852	3,322	181,510	581,922	284,836	22,441
Georgia.....	746,241	93,279	3,255	125,604	336,094	174,140	1,186
Hawaii.....	91,162	12,792	21	9,167	43,734	22,652	0
Idaho.....	70,060	7,586	53	10,431	34,344	17,123	523
Illinois.....	1,144,272	91,092	1,274	183,964	582,764	268,585	16,593
Indiana.....	415,167	48,484	1,110	62,663	195,456	104,383	0
Iowa.....	261,419	37,013	646	35,630	107,619	64,477	15,220
Kansas.....	209,329	24,646	111	23,931	99,095	56,495	0
Kentucky.....	525,497	57,260	1,911	100,387	219,452	121,135	16,424
Louisiana.....	640,562	90,807	1,772	94,687	314,083	139,213	0
Maine.....	150,623	21,600	192	24,635	61,841	36,189	5,533
Maryland.....	362,520	43,903	311	54,603	177,523	79,177	7,003
Massachusetts.....	651,056	96,198	9,792	104,092	294,145	141,293	5,536

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TABLE 16.—MEDICAID RECIPIENTS BY BASIS OF ELIGIBILITY BY STATE: FISCAL YEAR 1991—Continued

State	Total recipients ¹	Aged	Blind	Disabled	AFDC children	AFDC adults	Other title XIX ²
Michigan.....	1,112,533	85,930	2,211	150,290	563,754	310,348	0
Minnesota.....	421,738	54,512	635	40,925	210,293	104,574	10,799
Mississippi.....	469,684	67,966	4,727	82,435	225,502	87,907	1,147
Missouri.....	503,310	76,579	1,180	67,678	226,416	124,246	5
Montana.....	63,615	7,443	85	10,752	22,183	12,602	8,695
Nebraska.....	133,751	18,386	217	15,269	59,922	28,581	11,376
Nevada.....	59,296	8,303	414	8,248	26,461	14,100	1,469
New Hampshire.....	59,684	11,719	415	7,709	28,570	10,982	0
New Jersey.....	614,073	74,815	1,197	96,419	288,913	142,219	0
New Mexico.....	161,995	13,889	567	24,090	88,839	34,610	0
New York.....	2,461,537	335,948	3,801	347,279	1,095,225	497,347	181,937
North Carolina.....	667,203	109,796	1,120	80,029	302,847	173,410	1
North Dakota.....	52,539	10,343	32	6,544	21,554	11,287	2,175
Ohio.....	1,299,285	117,748	1,410	158,218	701,633	310,256	10,020
Oklahoma.....	304,659	53,629	635	37,876	143,424	68,050	1,045
Oregon.....	263,303	26,447	1,168	29,819	131,388	74,481	0
Pennsylvania.....	1,277,428	135,382	1,109	192,801	593,179	299,853	55,104
Rhode Island.....	163,704	30,103	472	32,770	64,538	34,584	1,237
South Carolina.....	375,233	55,146	1,814	73,753	164,238	80,256	26
South Dakota.....	57,145	9,217	146	8,854	26,683	12,245	0
Tennessee.....	697,411	89,041	2,436	135,165	322,389	137,751	10,629
Texas.....	1,728,629	244,136	3,770	161,244	909,551	409,928	0
Utah.....	129,274	8,412	118	12,637	66,022	38,280	1,003

Vermont.....	70,699	10,499	86	9,195	31,233	19,114	416
Virginia.....	442,073	72,427	1,134	67,261	200,723	100,528	0
Washington.....	506,279	47,592	369	67,124	216,629	143,302	29,849
West Virginia.....	283,708	29,720	274	41,909	121,981	87,630	2,194
Wisconsin.....	415,942	66,001	1,168	79,409	165,073	77,611	23,839
Wyoming.....	36,804	3,044	13	3,188	20,144	9,749	542
Puerto Rico.....	1,201,199	0	653	53,323	786,514	360,709	0
Virgin Islands.....	11,722	1,125	12	788	6,277	2,946	574
All jurisdictions.....	28,279,781	3,359,465	85,227	3,983,347	13,415,206	6,778,410	561,923
United States.....	27,066,860	3,358,340	84,562	3,929,236	12,622,415	6,414,755	561,349

¹ Total is unduplicated count of recipients. A small number of recipients are in more than one category during the year. Total recipients include unknowns which are not reflected in this table.

² This category is composed primarily of children not meeting the definition of dependent child, i.e., "Ribicoff Children".

Source: HCFA, BDMS, Office of Programs Systems. Data from Division of Medicaid Statistics January 4, 1993.

TABLE 17.—MEDICAID EXPENDITURES BY BASIS OF ELIGIBILITY BY STATE: FISCAL YEAR 1991

[In millions of dollars]

State	Total expenditure	Aged	Blind	Disabled	AFDC children	AFDC adults	Other title XIX ²	Aged, blind and disabled as a percent of total exp.	AFDC children as a percent of total exp.
Alabama.....	805	263	4	306	105	120	8	71.0	13.0
Alaska.....	160	34	(¹)	47	43	35	0	50.9	27.1
Arizona.....	84	9	(¹)	22	34	18	0	37.9	40.2
Arkansas.....	688	220	5	273	80	52	59	72.4	11.6
California.....	7,579	1,941	89	2,638	1,145	1,609	85	61.6	15.1
Colorado.....	673	200	4	263	94	96	16	69.5	13.9
Connecticut.....	1,630	831	3	516	214	1	65	82.8	13.1
Delaware.....	186	57	1	78	25	23	2	73.0	13.3
District of Columbia.....	446	139	(¹)	181	75	51	(¹)	71.6	16.8
Florida.....	2,944	922	12	974	567	427	44	64.8	19.3
Georgia.....	1,799	484	13	628	267	390	1	62.5	14.8
Hawaii.....	238	102	(¹)	56	37	41	0	66.5	15.4
Idaho.....	223	64	(¹)	96	31	31	1	71.9	13.9
Illinois.....	2,731	605	8	1,352	419	302	46	71.9	15.3
Indiana.....	1,662	472	7	693	261	222	0	70.6	15.7
Iowa.....	766	219	3	290	104	122	28	66.9	13.6
Kansas.....	553	167	1	199	86	92	0	66.3	15.5
Kentucky.....	1,200	308	6	473	187	191	31	65.5	15.6
Louisiana.....	1,723	414	8	646	359	297	0	62.0	20.8
Maine.....	536	212	1	190	58	63	12	75.1	10.9

Maryland.....	1,292	388	2	463	235	161	45	66.0	18.2
Massachusetts.....	2,828	1,114	78	934	403	295	4	75.2	14.3
Michigan.....	2,540	595	10	1,066	436	433	0	65.8	17.2
Minnesota.....	1,561	604	8	607	174	150	19	78.1	11.1
Mississippi.....	755	233	14	262	125	120	2	67.3	16.5
Missouri.....	1,118	427	4	359	187	136	(¹)	70.7	16.7
Montana.....	193	63	(¹)	75	17	19	14	71.6	9.0
Nebraska.....	390	143	1	131	50	42	22	70.6	12.8
Nevada.....	178	49	2	72	24	26	4	69.1	13.4
New Hampshire.....	292	150	7	92	27	16	0	85.2	9.3
New Jersey.....	2,725	885	7	1,121	281	376	0	73.9	10.3
New Mexico.....	342	84	4	131	71	52	0	64.0	20.7
New York.....	13,728	5,739	89	4,925	1,558	1,164	253	78.3	11.3
North Carolina.....	1,788	581	9	580	342	275	(¹)	65.5	19.2
North Dakota.....	227	90	(¹)	88	26	19	3	78.4	11.6
Ohio.....	3,653	1,190	8	1,258	725	464	9	67.2	19.8
Oklahoma.....	814	264	2	250	177	121	1	63.3	21.7
Oregon.....	667	164	19	254	101	90	0	65.5	15.2
Pennsylvania.....	3,436	1,137	3	1,148	621	461	67	66.6	18.1
Rhode Island.....	657	252	2	283	61	55	4	81.8	9.3
South Carolina.....	910	234	5	382	146	143	(¹)	68.2	16.0
South Dakota.....	196	71	1	79	29	16	0	77.1	14.6
Tennessee.....	1,485	382	6	548	297	219	32	63.1	20.0
Texas.....	3,532	1,230	14	1,001	657	630	0	63.5	18.6
Utah.....	311	53	1	122	55	77	1	56.4	17.8
Vermont.....	197	67	(¹)	79	20	28	1	74.6	10.4
Virginia.....	1,218	436	5	425	182	170	0	71.1	14.9

TABLE 17.—MEDICAID EXPENDITURES BY BASIS OF ELIGIBILITY BY STATE: FISCAL YEAR 1991—Continued

[In millions of dollars]

State	Total expenditure	Aged	Blind	Disabled	AFDC children	AFDC adults	Other title XIX ²	Aged, blind and disabled as a percent of total exp.	AFDC children as a percent of total exp.
Washington	1,131	375	2	334	159	242	20	62.8	14.0
West Virginia	542	166	1	189	66	110	11	65.6	12.1
Wisconsin	1,471	596	7	588	120	95	61	81.0	8.2
Wyoming	90	28	(¹)	22	20	19	1	55.7	21.7
Puerto Rico	146	0	(¹)	7	105	33	0	5.0	72.1
Virgin Islands	4	1	(¹)	1	1	1	(¹)	36.1	26.9
All jurisdictions	77,048	25,453	475	27,798	11,690	10,439	973	69.7	15.2
United States	76,898	25,452	475	27,790	11,583	10,405	973	69.9	15.1

¹ Denotes expenditures of less than \$500,000.² This category is composed primarily of children not meeting the definition of dependent child, i.e., "Ribicoff Children".

Note: Total expenditures include unknowns which are not reflected in this table.

Source: HCFA, BDMS, Office of Programs Systems. Data from Division of Medicaid Statistics, January 4, 1993.

TABLE 18.—TOTAL AND PER CAPITA MEDICAID PAYMENTS FOR CATEGORICALLY NEEDY AND MEDICALLY NEEDY, PRELIMINARY ESTIMATES, FISCAL YEARS 1975, 1981, 1990, AND 1991

	1975			1981			1991			Percent change 1975-91	
	Total amount (mil- lions)	Percent of total	Per capita	Total amount (mil- lions)	Percent of total	Per capita	Total amount (in millions)	Percent of total	Per capita	Total spending	Per capita
Categorically needy:											
Receiving cash payments	\$7,188	58.7	\$431	\$14,534	53.4	\$861	\$35,324	45.8	\$2,034	391.4	371.9
Aged	1,341	11.0	555	2,480	9.1	1,270	5,193	6.7	3,453	287.2	522.2
Blind	61	.5	717	109	.4	1,527	301	.4	4,254	393.4	493.3
Disabled	2,042	16.7	1,094	5,616	20.6	2,490	16,563	21.5	5,544	711.1	406.8
AFDC children	1,850	15.1	222	3,002	11.0	361	6,921	9	807	274.1	263.5
Adults in AFDC families	1,895	15.5	478	3,328	12.2	769	6,345	8.2	1,501	234.8	214.0
Not receiving cash payments	1,753	14.3	1,261	4,736	17.4	2,641	14,495	18.8	3,826	726.9	203.4
Aged	1,275	10.4	2,331	3,143	11.6	5,273	6,832	8.9	10,956	435.8	370.0
Blind	12	.1	1,094	19	.1	2,785	74	.1	13,484	516.7	1,132.5
Disabled	353	2.9	1,854	1,214	4.5	5,146	4,349	5.6	11,338	1,132.0	511.5
AFDC children	61	.5	152	153	.6	302	1,424	1.8	930	2,234.4	511.8
Adults in AFDC families	27	.2	144	87	.3	298	1,297	1.7	1,375	4,703.7	854.9
Other title XIX	25	.2	463	120	.4	734	519	.7	1,722	1,976.0	271.9
Total, categorically needy	8,941	73.0	495	19,270	70.8	1,032	49,818	64.7	2,355	457.2	375.8
Medically needy:											
Aged	1,742	14.2	2,672	4,303	15.8	5,260	8,614	11.2	13,377	394.5	400.6
Blind	20	.2	1,472	27	.1	3,132	63	.1	18,471	215.0	1154.8
Disabled	657	5.4	2,202	2,471	9.1	4,924	4,580	5.9	13,808	597.1	527.1
AFDC children	274	2.2	324	353	1.3	460	1,461	1.9	914	433.2	182.1
Adults in AFDC families	140	1.1	368	348	1.3	613	1,127	1.5	1,568	705.0	326.1

TABLE 18.—TOTAL AND PER CAPITA MEDICAID PAYMENTS FOR CATEGORICALLY NEEDY AND MEDICALLY NEEDY, PRELIMINARY ESTIMATES, FISCAL YEARS 1975, 1981, 1990, AND 1991—Continued

	1975			1981			1991			Percent change 1975-91
	Total amount (mil- lions)	Percent of total	Per capita	Total amount (mil- lions)	Percent of total	Per capita	Total amount (in millions)	Percent of total	Per capita	
Other title XIX	467	3.8	267	433	1.6	360	297	.4	1,747	554.3
Total, medically needy	3,301	27.0	838	7,935	29.2	2,145	16,141	20.9	4,658	455.8
Grand total	12,242	100.0	556	27,205	100.0	1,216	77,048	100.0	2,725	831.6

Note: Totals may not add due to rounding. Fiscal year 1975 ends in June; fiscal years 1981 and 1988 end in September. Total includes other coverage groups and unknowns. Other categories not shown in the total for 1991 are: Other coverage pre-88, \$6,799; coverage from 88, \$4,070; and mass unknown, \$220.

Source: HCFA, BDMS, OPS. Division of Medicaid Statistics, January 4, 1993.

TABLE 19.—MEDICAID RECIPIENTS AND PAYMENTS BY BASIS OF ELIGIBILITY,
FISCAL YEAR 1991

	Amount (in millions)	Percent of total	Recipients (in thousands)	Percent of total	Per capita payments
Age 65 and over	25,453.3	33.0	3,359.5	11.9	7,576.6
Blind	474.9	0.6	85.2	0.3	5,572.2
Disabled	27,798.0	36.1	3,983.3	14.1	6,978.6
Dependent children under age 21	11,689.5	15.2	13,415.2	47.4	871.4
Adults in families with dependent children	10,439.5	13.5	6,778.4	24.0	1,540.1
Other title XIX	973.2	1.3	561.9	2	1,731.9
Total	77,048.4	100	28,279.8	100	2,724.5

Note: Recipients and payments totals include unknowns which are not shown in this table.

Source: HCFA, BDMS, Office of Programs Systems. Data from Division of Medicaid Statistics, January 4, 1993.

TABLE 20.—MEDICAID PAYMENTS AND PER CAPITA PAYMENTS BY BASIS OF ELIGIBILITY, FISCAL YEARS 1975, 1981, AND 1983-91

[Amounts in millions of dollars]

	1975	1981	1983	1984	1985	1986	1987	1988	1989	1990	1991	Percent change, 1975- 91
Payments:												
In Nominal Dollars												
Age 65 and over	4,358	9,926	11,954	12,815	14,096	15,097	16,037	17,135	18,558	21,508	25,453	484.1
Blind	93	154	183	219	249	277	309	344	409	434	475	411.3
Disabled	3,052	9,301	11,184	11,758	13,203	14,635	16,507	18,250	20,476	23,969	27,798	810.7
Dependent children under age 21	2,186	3,508	3,836	3,979	4,414	5,135	5,508	5,848	6,892	9,100	11,690	434.7
Adults in families with dependent children	2,062	3,763	4,487	4,420	4,746	4,880	5,592	5,883	6,897	8,590	10,439	406.4
Other title XIX	492	552	747	700	798	980	1,078	1,198	1,137	1,051	973	97.9
Total	12,242	27,204	32,391	33,891	37,508	41,005	45,050	48,710	54,500	64,859	77,048	529.4
Per capita payment:												
Age 65 and over	1,205	2,948	3,545	3,957	4,605	4,808	4,975	5,425	5,926	6,717	7,577	528.6
Blind	850	1,784	2,379	2,766	3,104	3,401	3,644	4,005	4,319	5,212	5,572	555.6
Disabled	1,296	3,108	3,932	4,149	4,496	4,721	5,008	5,366	5,858	6,595	6,979	438.4
Dependent children under age 21	228	366	402	411	452	512	542	583	668	811	871	282.6
Adults in families with dependent children	455	725	802	789	860	864	999	1,069	1,206	1,429	1,540	238.3
Other title XIX	273	405	662	590	658	719	761	891	967	1,062	1,732	534.1
Total, per capita payment	556	1,238	1,503	1,569	1,719	1,821	1,949	2,126	2,318	2,568	2,725	389.8

In Constant 1991 Dollars

Payments:

Age 65 and over	11,383	15,107	16,370	16,850	17,874	18,688	19,287	19,798	20,464	22,593	25,453	123.6
Blind	243	234	251	288	316	343	372	397	451	456	475	95.5
Disabled	7,972	14,156	15,316	15,460	16,742	18,116	19,852	21,086	22,579	25,179	27,798	248.7
Dependent children under age 21	5,710	5,339	5,253	5,232	5,597	6,357	6,624	6,757	7,600	9,559	11,690	104.7
Adults in families with dependent children	5,386	5,727	6,145	5,812	6,018	6,041	6,725	6,797	7,605	9,024	10,439	93.8
Other title XIX	1,285	840	1,023	920	1,012	1,213	1,296	1,384	1,254	1,104	973	-24.3
Total ¹	31,976	41,403	44,357	44,562	47,562	50,759	54,180	56,281	60,097	68,132	77,048	141.0
Per capita payment:												
Age 65 and over	3,147	4,487	4,855	5,203	5,839	5,952	5,983	6,268	6,535	7,056	7,577	140.7
Blind	2,220	2,715	3,258	3,637	3,936	4,210	4,383	4,627	4,763	5,475	5,572	151.0
Disabled	3,385	4,730	5,385	5,455	5,701	5,844	6,023	6,200	6,460	6,928	6,979	106.2
Dependent children under age 21	596	557	551	540	573	634	652	674	737	852	871	46.3
Adults in families with dependent children	1,188	1,103	1,098	1,037	1,091	1,070	1,201	1,235	1,330	1,501	1,540	29.6
Other title XIX	713	616	907	776	834	890	915	1,029	1,066	1,116	1,732	142.9
Total, per capita payment	1,452	1,884	2,058	2,063	2,180	2,254	2,344	2,456	2,556	2,698	2,725	87.6

¹ Data exclude unknowns.

Note: Total may not add due to rounding. Fiscal year 1975 ends in June; all other fiscal years end in September. Nominal dollars converted to constant dollars using CPI-U price index. Total expenditures includes other coverage groups and unknowns for fiscal year 1991.

Source: HCFA, BDMS, OPS, Division of Medicaid Statistics, January 4, 1993, and Congressional Research Service.

TABLE 21.—MEDICAID PAYMENTS BY SERVICE CATEGORY, FISCAL YEARS 1975, 1981, 1989–91

[Amounts in millions of constant 1990 dollars]

	1975		1981		1989		1990		1991		Average annual percent change 1975–91
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	
Inpatient hospital.....	\$9,396	30.9	\$11,693	29.7	\$15,586	27.2	\$18,388	28.4	\$21,901	28.4	5.4
General.....	8,389	27.6	10,423	26.4	14,043	24.5	16,674	25.7	19,891	25.8	5.6
Mental.....	1,007	3.3	1,271	3.2	1,543	2.7	1,714	2.6	2,010	2.6	4.4
Skilled nursing facilities.....	6,052	19.9	5,846	14.8	6,991	12.2	8,026	12.4	20,709	26.9	8.0
Intermediate care facilities.....	5,632	18.5	10,870	27.6	16,292	28.5	17,021	26.2	7,680	10.0	2.0
Facilities for mentally retarded.....	945	3.1	4,341	11.0	6,980	12.2	7,354	11.3			
Other.....	4,687	15.4	6,530	16.6	9,312	16.3	9,667	14.9			
Physician.....	3,046	10.0	3,044	7.7	3,577	6.3	4,018	6.2	4,952	6.4	3.1
Dental.....	843	2.8	787	2.0	523	0.9	593	0.9	710	0.9	-1.1
Other practitioner.....	316	1.0	330	0.8	333	0.6	372	0.6	437	0.6	2.0
Outpatient hospital.....	927	3.0	2,041	5.2	2,978	5.2	3,324	5.1	4,283	5.6	10.0
Clinic.....	967	3.2	540	1.4	1,311	2.3	1,688	2.6	2,211	2.9	5.3
Lab and X-ray.....	313	1.0	213	0.5	619	1.1	721	1.1	897	1.2	6.8
Home health.....	174	0.6	620	1.6	2,700	4.7	3,404	5.2	4,101	5.3	21.8
Prescribed drugs.....	2,026	6.7	2,224	5.6	3,872	6.8	4,420	6.8	5,424	7.0	6.3
Family planning.....	167	0.5	201	0.5	238	0.4	265	0.4	359	0.5	4.9
Early and periodic screening ¹	(¹)	0.0	97	0.2	153	0.3	198	0.3	321	0.4	N/A
Rural health clinic ¹	(¹)	0.0	6	0.0	23	0.0	34	0.1	63	0.1	N/A
Other.....	579	1.9	897	2.3	2,011	3.5	2,385	3.7	2,999	3.9	10.8
Total.....	30,440	100.0	39,414	100.0	57,209	100.0	64,859	100.0	77,048	100	6.0

¹ 1975 data not available. Note: Totals may not add due to rounding. Fiscal year 1975 ends in June; all other fiscal years end in September. Spending amounts put in constant dollars using the Consumer Price Index (CPI-U). Data exclude unknowns. Source: HCFA, BDMIS, Office of Programs Systems, Data from Division of Medicaid Statistics, January 4, 1993.

TABLE 22.—MEDICAID RECIPIENTS BY SERVICE CATEGORY, FOR FISCAL YEARS 1975, 1981, 1988, 1989–1991

[In thousands]

	Fiscal year—					
	1975	1981	1988	1989	1990	1991
Inpatient hospital:						
General.....	3,432	3,703	3,832	4,171	4,593	5,137
Mental.....	67	90	60	90	92	5,072
Skilled nursing facilities.....	630	623	579	564	601	65
Intermediate care facilities:						
Facilities for the mentally re-						
tarded.....	69	151	145	148	147	1,499
Other.....	682	762	866	888	860	146
Physician.....	15,198	14,403	15,265	15,686	17,078	19,321
Dental.....	3,944	5,173	5,072	4,214	4,552	5,209
Other practitioner.....	2,673	3,582	3,480	3,555	3,873	4,282
Outpatient hospital.....	7,437	10,018	10,533	11,344	12,370	14,137
Clinic.....	1,086	1,755	2,256	2,391	2,804	3,511
Laboratory & X ray.....	4,738	3,822	7,579	7,759	8,959	10,505
Home health.....	343	402	569	609	719	813
Prescribed drugs.....	14,155	14,256	15,323	15,916	17,294	19,602
Family planning.....	1,217	1,473	1,525	1,564	1,752	2,185
Early and periodic screening.....	(¹)	1,969	2,295	2,524	2,952	3,957
Rural health clinics.....	(¹)	81	140	166	224	405
Other.....	2,911	2,344	4,166	4,583	5,126	5,957
Unduplicated total.....	22,007	21,980	22,907	23,511	25,255	28,280

¹ 1975 data not available.

Source: HCFA, BDMS, Office of Programs Systems, Division of Medicaid Statistics, 1993.

TABLE 23.—MEDICAID MEDICAL VENDOR PAYMENTS BY BASIS OF ELIGIBILITY AND TYPE OF SERVICE: FISCAL YEAR 1991

Type of service	Aged	Blind	Disabled	AFDC		Other title XIX	Total
				Children	Adults		
				[In millions of dollars]			
Inpatient hospital services.....	1,634.6	86.8	7,276.9	5,420.0	4,894.6	458.1	19,771.0
Mental hospital services for the aged.....	959.8	.3	53.3	.5	.7	0	1,014.6
SNF/ICF mental health services for the aged.....	94.9	.1	3.7	0	0	0	98.6
Inpatient psychiatric services, age <22.....	0	.3	254.7	495.6	8.0	136.2	894.8
Intermediate care facility for the mentally retarded.....	429.7	122.5	7,058.8	38.4	4.5	11.0	7,664.9
Intermediate care facility all other.....							
Nursing facility services.....	17,128.0	86.7	3,415.8	18.3	22.5	7.6	20,678.8
Physician's services.....	343.7	23.7	1,182.7	1,520.3	1,785.0	84.1	4,939.4
Dental services.....	44.8	1.6	105.3	346.4	191.2	19.5	708.9
Other practitioners' services.....	60.7	1.9	155.3	109.8	102.8	6.1	436.7
Outpatient hospital services.....	254.7	18.0	1,294.1	1,366.1	1,269.6	74.2	4,276.7
Clinic services.....	136.9	15.4	1,238.4	442.5	324.0	49.4	2,206.7
Home health services.....	2,026.2	44.4	1,872.9	93.2	43.7	18.3	4,098.8
Family planning services.....	.8	.5	19.0	36.9	296.3	5.3	358.8
Lab and x ray services.....	47.7	4.0	269.0	186.6	377.6	10.2	895.1
Prescribed drugs.....	1,823.1	41.9	2,254.8	589.7	680.4	30.8	5,420.6
Early and periodic screening.....	.6	.1	10.5	287.8	12.6	7.5	319.1
Rural health clinic services.....	1.9	.2	9.3	27.9	22.4	.7	62.4
Other care.....	465.0	26.4	1,323.3	709.6	403.5	54.1	2,981.8
Unknown.....	.2	0	.3	.1	0	0	.7
Total.....	25,453.3	474.9	27,798.0	11,689.5	10,439.5	973.2	76,828.3

	[In percent]					
Inpatient hospital services.....	6.4	18.3	26.2	46.4	46.9	47.1
Mental hospital services for the aged.....	3.8	.1	.2	0	0	0
SNF/ICF mental health services for the aged.....	.4	0	0	0	0	0
Inpatient psychiatric services, age <22.....	0.0	.1	.9	4.2	.1	14.0
Intermediate care facility for the mentally retarded.....	1.7	25.8	25.4	.3	0	1.1
Intermediate care facility all other.....						
Nursing facility services.....	67.3	18.3	12.3	.2	.2	.8
Physician's services.....	1.4	5.0	4.3	13.0	17.1	8.6
Dental services.....	.2	.3	.4	3.0	1.8	2.0
Other practitioners' services.....	.2	.4	.6	.9	1.0	.6
Outpatient hospital services.....	1.0	3.8	4.7	11.7	12.2	7.6
Clinic services.....	.5	3.2	4.5	3.8	3.1	5.1
Home health services.....	8.0	9.3	6.7	.8	.4	1.9
Family planning services.....	0	.1	.1	.3	2.8	.5
Lab and x ray services.....	.2	.8	1.0	1.6	3.6	1.0
Prescribed drugs.....	7.2	8.8	8.1	5.0	6.5	3.2
Early and periodic screening.....	0	0	0	2.5	.1	.8
Rural health clinic services.....	0	0	0	.2	.2	.1
Other care.....	1.8	5.6	4.8	6.1	3.9	5.6
Unknown.....	0	0	0	0	0	0
Total.....	100.0	100.0	100.0	100.0	100.0	100.0
						100.0

Source: HCFA, BDMS, Office of Programs Systems. Data from Division of Medicaid Statistics, January 4, 1993.

TABLE 24.—AVERAGE EXPENDITURE PER RECIPIENT BY BASIS OF ELIGIBILITY BY STATE:
FISCAL YEAR 1991

State	Total	Aged	Blind	Disabled	AFDC Children	AFDC Adults	Other title XIX
All jurisdictions.....	\$2,725	\$7,577	\$5,572	\$6,256	\$1,047	\$1,540	\$1,732
United States	2,841	7,579	5,614	6,326	1,070	1,622	1,733
Alabama	1,997	3,841	2,292	3,430	829	1,499	1,540
Alaska	3,123	9,995	3,665	10,998	2,320	2,321	0
Arizona	268	499	732	628	184	244	0
Arkansas	2,417	4,788	3,807	4,205	791	1,050	1,793
California	1,886	4,251	3,748	4,158	951	1,418	2,103
Colorado	3,011	6,279	24,763	8,681	1,021	1,707	3,927
Connecticut	5,994	19,278	5,521	7,600	2,469	140	1,953
Delaware	3,671	11,355	5,588	9,328	1,122	1,893	1,710
District of Columbia.....	4,456	12,136	1,906	10,698	1,461	2,271	4,412
Florida	2,358	5,271	3,553	5,177	1,083	1,498	1,952
Georgia.....	2,411	5,190	3,933	5,005	1,028	2,242	1,019
Hawaii.....	2,606	7,974	8,604	5,904	907	1,816	0
Idaho	3,184	8,395	5,051	9,239	1,112	1,790	2,052
Illinois	2,387	6,644	5,903	5,553	717	1,123	2,754
Indiana	4,003	9,743	6,371	11,062	1,333	2,131	0
Iowa	2,930	5,919	3,989	8,842	978	1,885	1,828
Kansas	2,642	6,785	5,119	8,079	832	1,627	0
Kentucky	2,284	5,371	3,303	4,265	861	1,577	1,915
Louisiana	2,690	4,559	4,455	6,643	1,313	2,130	0
Maine.....	3,561	9,834	3,324	7,709	937	1,736	2,144
Maryland	3,565	8,829	4,845	7,218	1,195	2,029	6,367
Massachusetts.....	4,344	11,584	7,990	8,011	2,310	2,084	727
Michigan	2,283	6,926	4,302	6,401	755	1,394	0
Minnesota.....	3,702	11,089	12,270	14,440	669	1,433	1,747
Mississippi.....	1,607	3,426	2,859	3,177	655	1,367	1,590
Missouri	2,221	5,570	3,491	5,306	856	1,098	2,078
Montana	3,037	8,434	3,709	4,586	784	1,506	1,609
Nebraska	2,915	7,751	6,673	8,683	887	1,480	1,974
Nevada	3,005	5,939	5,660	8,673	889	1,819	2,727
New Hampshire.....	4,898	12,829	15,692	12,628	998	1,414	0
New Jersey.....	4,437	11,835	6,185	11,671	1,107	2,640	0
New Mexico.....	2,113	6,062	6,239	5,453	911	1,506	0
New York	5,577	17,084	23,458	10,727	1,306	2,340	1,393
North Carolina	2,679	5,295	7,983	6,527	1,638	1,586	81
North Dakota.....	4,319	8,680	5,385	10,450	1,269	1,691	1,256
Ohio	2,812	10,102	5,651	7,949	1,562	1,495	943
Oklahoma	2,673	4,915	2,659	6,794	1,385	1,776	1,400
Oregon	2,531	6,188	15,991	8,908	914	1,204	0
Pennsylvania.....	2,690	8,397	2,981	5,787	1,175	1,537	1,211
Rhode Island.....	4,014	8,363	5,215	8,582	956	1,585	2,918
South Carolina.....	2,426	4,242	2,967	5,184	1,204	1,784	4,842
South Dakota	3,435	7,744	3,699	8,961	1,117	1,345	0

TABLE 24.—AVERAGE EXPENDITURE PER RECIPIENT BY BASIS OF ELIGIBILITY BY STATE:
FISCAL YEAR 1991—Continued

State	Total	Aged	Blind	Disabled	AFDC Children	AFDC Adults	Other title XIX
Tennessee.....	2,130	4,290	2,566	4,065	874	1,592	3,011
Texas.....	2,043	5,036	3,836	6,206	799	1,537	0
Utah.....	2,408	6,273	5,599	9,416	1,078	2,021	892
Vermont.....	2,782	6,396	3,687	8,621	656	1,486	2,036
Virginia.....	2,756	6,025	4,415	6,107	908	1,694	0
Washington.....	2,235	7,876	4,475	4,136	736	1,688	656
West Virginia.....	1,912	5,585	3,138	4,545	817	1,257	4,892
Wisconsin.....	3,537	9,037	6,323	7,474	845	1,221	2,579
Wyoming.....	2,450	9,360	3,495	6,805	971	1,955	2,030
Puerto Rico.....	122	0	240	132	121	93	0
Virgin Islands.....	359	676	152	708	163	367	821

Source: HCFA, BDMS, Office of Statistics and Data Management, Division of Medicaid Statistics, January 4, 1993.

TABLE 25.—OPTIONAL MEDICAID SERVICES AND NUMBER OF STATES ¹ OFFERING EACH SERVICE AS OF OCTOBER, 1992

Service	States offering service to categorically needy only	States offering service to both categorically and medically needy	Total
Podiatrists' services.....	13	34	47
Optometrists' services.....	15	36	51
Chiropractors' services.....	8	21	29
Psychologists' services.....	8	23	31
Medical social workers' services.....	2	5	7
Nurse Anesthetists' services.....	9	17	26
Private duty nursing.....	7	21	28
Clinic services.....	15	36	51
Dental services.....	12	35	47
Physical therapy.....	13	31	44
Occupational therapy.....	10	26	36
Speech, hearing and language disorder.....	14	29	43
Prescribed drugs.....	16	38	54
Dentures.....	10	30	40
Prosthetic devices.....	15	37	52
Eyeglasses.....	14	34	48
Diagnostic services.....	6	23	29
Screening services.....	6	23	29
Preventive services.....	6	22	28
Rehabilitative services.....	13	35	48
Services for age 65 or older in mental institution:			
A. Inpatient hospital services.....	13	26	39
B. SNF services.....	11	22	33
C. ICF/MR services.....	19	30	49
Inpatient psychiatric services for under age 21.....	11	30	41
Christian Science nurses.....	4	3	7
Christian Science sanatoria.....	7	10	17
SNF for under age 21.....	20	31	51
Emergency hospital services.....	14	28	42
Personal care services.....	9	23	32
Transportation services.....	15	39	54
Case management services.....	10	32	42
Hospice services.....	11	24	35
Respiratory care services.....	5	11	16

¹ Includes the territories. Thus the maximum number is 53.

Source: Health Care Financing Administration, Office of Prepaid Health.

FEDERAL HOUSING ASSISTANCE ¹⁹

A number of Federal programs administered by the Department of Housing and Urban Development (HUD) and the Farmers Home Administration (FmHA) address the housing needs of lower-income households. Housing assistance has never been provided as an entitlement to all households that qualify for aid. Instead, each year the Congress has appropriated funds for a number of new commitments. Because these commitments generally run from 5 to 50 years, the appropriation is actually spent gradually, over many years. These additional commitments have expanded the pool of available aid, thus increasing the total number of households that can be served. They have also contributed to growth in Federal outlays in the past and have committed the Government to continuing expenditures for many years to come.

The number of additional commitments funded annually has been cut back in recent years, and the nature and mix of assistance programs has changed. This section describes recent trends in the number and mix of new commitments, as well as trends in expenditures.

TRENDS IN FEDERAL HOUSING ASSISTANCE

The Federal Government has traditionally provided housing aid directly to lower-income households in the form of rental subsidies and mortgage-interest subsidies. Recent legislation, the 1990 Cranston-Gonzalez National Affordable Housing Act (hereafter referred to as the 1990 Housing Act), authorized a new, indirect approach in the form of housing block grants to State and local governments, which may use these funds for various housing assistance activities specified in the law. Over the past decade, both the number of households receiving aid and total federal expenditures have increased each year, but the growth in outstanding commitments has slowed significantly during the 1980s.

Types of housing assistance

A number of different housing assistance programs have evolved in response to changing housing policy objectives. The primary purpose of housing assistance has always been to improve housing quality and to reduce housing costs for lower-income households. Other goals have included promoting residential construction, expanding housing opportunities for disadvantaged groups and groups with special housing needs, promoting neighborhood preservation and revitalization, increasing homeownership, and, most recently, empowering the poor to become self-sufficient.

New housing programs have been developed over time because of shifting priorities among these objectives—as housing-related problems changed—and because of the relatively high federal costs associated with some approaches. Other programs have become inactive in that the Congress stopped appropriating funds for new assistance commitments through them. Because housing programs

¹⁹ This discussion draws directly from a CBO Study entitled "Current Housing Problems and Possible Federal Responses," December 1988. For this report, CBO has updated all figures with 4 additional years of data.

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